HOW TO INVEST
WHEN PRICES ARE RISING

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A Scientific Method of Providing for the Increasing Cost of Living

IRVING FISHER
EDWIN WALTER KEMMERER
HARRY G. BROWN
WALTER E. CLARK
J. PEASE NORTON
MONTGOMERY ROLLINS
G. LYNN SUMNER

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CHAPTER I

INTRODUCTION

BY IRVING FISHER, PH.D.

Professor of Political Economy, Yale University

CHAPTER I

INTRODUCTION

THE whole world is now ringing with complaints of the high cost of living. The great dominant fact to-day is the rising tide of prices, just as a generation ago the great dominant fact was the ebbing tide of prices. Moreover, whether the tide of prices rises or falls, the change has a profound effect on the economic ocean and encroaches even on the social and political horizons.

A generation ago the whole world was complaining of "depression of trade." Then the discussion revolved about the under-supply of gold. To-day we hear much of the over-supply of gold. Then the social discontent led to a new alignment of political parties, and to-day similar discontent from an opposite cause is again disturbing our political conditions.

The high cost of living is an issue in every land. Parties in power are held responsible. Parties out of power promise that they will "do something to reduce it." The situation is a serious one, for

in times of such excitement the public is apt to blame the wrong men and things and to demand impossible or revolutionary remedies. We need a careful, scientific, sane discussion of the subject in all its aspects—a discussion in which the whole world is represented, because in it the whole world is concerned. For this reason it has been suggested that there should be called an International Conference on the High Cost of Living. President Taft has recommended that such a Conference be called. A Bill for that purpose has passed the Senate and will doubtless be considered by the House at its next session.

Meantime economists, financiers, officials and the public press are giving much time and thought to this all-engrossing subject. Much valuable material is gradually accumulating. This book contains some of this material not elsewhere available. It emphasizes the effect of the rising tide of prices on investments and investors.

The Investor's Problem

The investor is one who makes a present sacrifice in order to gain a future return. If prices rise between the present sacrifice and the future return, this fact is bound to influence the results.

If his promised return is a definite sum of money, the rise of prices means that the purchasing power of this sum will have been curtailed. If his investment is arranged in some other terms, he may gain.

In a general way during the recent decade and a half of upward prices, it is the bondholder who has lost and the stockholder who has gained. This is clearly shown in several of the papers which constitute this book. We may say roughly that the rise in prices has subtly robbed the bondholder for the benefit of the stockholder. This is, in a broad use of the term, a gross injustice. But it is more. By introducing confusion into contracts it makes every contract a speculation. The progress of business depends on stability. The effort of every business man is to produce stable conditions. He wishes a dependable government, security of credit, and uniformity of conditions under which he does his work. The whole business of insurance was built up in order to produce a greater degree of certainty. Trade Journals and special statistical services have been created to enable business men to foresee clearly impending changes. Anything which, on the contrary, upsets calculations and introduces insta-

bility, uncertainty and obscurity, introduces a heavy handicap.

Where stability has not been possible, business men have tried to separate off the risky enterprises so that they may be recognized and treated as such and handled by experts who make a particular business of dealing in these hazards. Certain wholesome customs based on such classifications have arisen. For instance, it is agreed generally that trustees ought not to invest in speculative enterprises, the idea being that their beneficiaries, often widows and orphans, have a right to a fixed and certain return on their investment. As a matter of fact, however, what investments can we find which offer real fixity or certainty of income? The trustee has assumed that gilt-edged bonds are safe and has preferred such investments to stocks, since all stocks involve the risks of business. Yet, as every reader of this book will clearly see, the man or woman who invests in bonds is speculating in the general level of prices, or the purchasing power of money.

A Choice Between Risks

There is not much to choose between the risks run by investing in stocks and risks run by in-

vesting in bonds. The two risks are, it is true, of different kinds, one being the risks of particular industries, and the other the risks of changes in the value of the gold dollar. But they are both real risks. It surely ought to be possible to have a class of investments in which the funds of widows and orphans can be safely put and which will insure to them a stable income.

A servant girl who placed one hundred dollars in the savings bank fifteen years ago and who now withdraws this with accumulated interest, amounting to about fifty dollars, will find that with the whole amount (one hundred and fifty dollars), she can scarcely purchase as much as she could have purchased with the original principal fifteen years ago. What has she to show for her investment and for waiting fifteen long years for her return? Nothing whatever, except the original principal. True she has 50 per cent. more dollars, but this does not represent any more value. The increase in the number of dollars has barely offset the shrinkage in their purchasing power. She might as well have bought jewelry or other articles fifteen years ago, and held them to the present time; she would then have had the use of them for fifteen years and the same value to-day,

instead of having made the sacrifice of depositing her hard-earned savings.

The same principle applies to the bondholder, who, with a scant 4 per cent. on his investment, has an income not so real as apparent; for the $40 which he annually gets on his thousand-dollar bond buys progressively less as the years pass by, while the thousand dollars of principal, if he ever wishes to get it, will have shrunk in the same proportion.

The Depreciating Dollar

We are so accustomed to measure everything in money that we often forget that money itself is only a measure. It is almost as difficult for an ordinary man to think of a dollar as changing as it was for the contemporaries of Copernicus to understand that the earth moves. It will help every man who wishes to think clearly on these subjects, if he will express the rising cost of living the other way about, and refer to it as the falling of the purchasing power of money. What is really happening is that the dollar is changing. The dollar to-day is only two-thirds as large in actual purchasing power—will go only two-thirds as far in satisfying wants—as fifteen years ago.

The commercial world needs a stable dollar as much as it needs stability in any other unit—in fact more, for other units are used only in particular transactions, but the dollar in practically every transaction. We have standardized the yard as a unit of length, the pound as a unit of weight, the kilowatt as a unit of electricity, and every other commercial unit except the unit of purchasing power, the dollar.

There was a time when the yard fluctuated, being the girth of the chieftain of the tribe. As commercial relations increased in importance and extended over periods of time, it became necessary to have a standard yard. Fancy what havoc would be wrought if the yard were to-day the girth of the President of the United States! Those who had contracts to deliver so many yards of cloth would now be in great uncertainty if the time for delivery were after the next Presidential inauguration! They would not know which of three girths would then be the yard! And yet we allow the *unit of purchasing power* to fluctuate constantly and have scarcely asked ourselves if it is possible to make it stable.

I have in my "Purchasing Power of Money," and elsewhere, tried to show that such stability is

not only a necessity of civilization, but is also practically attainable. Before, however, we can talk in any practical way of securing a stable yardstick of purchasing power, we must understand the evils of instability. I know of no clearer statements of these evils than those to be found in this book. I commend it to the serious study of investors and all who are interested in the true meaning of the "high cost of living."

CHAPTER II

WHY IT COSTS YOU MORE TO LIVE

BY EDWIN WALTER KEMMERER, PH.D.

Professor of Economics and Finance, Princeton University

CHAPTER II

Why It Costs You More to Live

MONEY is worth what it will buy. A dollar in the United States to-day will buy on the average approximately as many goods as 67 cents would in 1896. In other words, our gold standard unit of value upon which we have prided ourselves so much has depreciated in value 33 per cent. in 15 years. This assertion, if true, is of the utmost importance to men making investments in bonds and mortgages which yield fixed rates of income and at maturity return merely the par value of the principal. What, then, is the evidence for the assertion that the dollar has lost one-third of its value since 1896?

The United States government, through its Bureau of Labor, publishes annually price tables showing by months the wholesale prices of 257 important commodities. These prices are collected from reliable sources all over the country and the report upon them is prepared by trained men. The prices for each article are reduced to percentage figures, the average prices for the 10 years 1890-1899 being taken as 100. Then the

percentage figures, or "index numbers" as they are called, for all 257 commodities for each year are averaged together, and the resulting composite represents the general index number for the year. In every year some prices fall and some rise; if falling prices preponderate, the general index number declines; if rising prices preponderate, it advances. Comparing 1896, the year before the recent advance in the cost of living began, with 1910, and comparing also the 10-year period 1890-1899 with 1910, we observe the following results:

PRICES IN 1910 AS COMPARED WITH PRICES IN 1896 AND IN THE PERIOD 1890–1899

Kind of Commodity	Number	Percentage Increase in 1910 over 1896	Percentage Increase in 1910 on average for 1890–1899
Farm products	20	110.2	64.6
Foods, etc	57	53.6	28.7
Cloths and clothing	65	35.5	23.7
Fuel and lighting	13	20.2	25.4
Metals and implements	38	37.1	28.5
Lumber and building materials	28	64.0	53.2
Drugs and chemicals	9	26.3	17.0
House-furnishing goods	14	18.7	11.6
Miscellaneous	13	45.6	33.1
All commodities	257	45.6	31.6

Every group of commodities, it will be observed, showed a substantial advance during the periods

studied and the average advance for all 257 commodities since 1896 was 45.6 per cent., or 3.3 per cent. a year. A study of 202 of the commodities which are readily comparable during the entire period shows that the price of 83 out of every 100 was higher for 1910 than the average for the period 1890-1899; that the price of 16 was lower; and of one was the same. Only 4 articles out of every 100 decreased 25 per cent. or more, while 49 increased 25 per cent. or more.

If we turn from the index numbers of the Bureau of Labor to those of Bradstreet (covering 96 commodities), and of Dun (as supplemented by the Gibson index numbers), we find substantially the same story. The Bradstreet index numbers increased from 1896 to January 1, 1912, 51 per cent., or 3.2 per cent. a year; while the Dun-Gibson index numbers increased from 1896 to February 19, 1910, by 56 per cent., or 4 per cent. a year.

The evidence, therefore, points strongly to an advance in prices since 1896, averaging for all classes of commodities something like 50 per cent.; or, as stated above, it shows that the value of a dollar to-day is approximately the same as the value of 67 cents a decade and a half ago.

Loaning Money at a Loss

The significance of this fact to the investor is evident. If a man bought at $1,000 a 5 per cent. bond January 1, 1896, maturing January 1, 1912, he bought a secured right to draw $50 a year for 16 years, and to receive back his principal at the end of that period. On the average his $50-a-year interest declined in its purchasing power about 3 per cent. a year, and when the bond matured the $1,000 principal which was repaid was equivalent *in real purchasing power* to only 667 of the dollars which he originally paid for the bond.

If the purchasing power of the dollar in a given year depreciates more than the rate of interest realized upon the investment, obviously the *rate of real interest* becomes negative, that is, the creditor actually pays the debtor for borrowing and using his money. In several years of the period (1896-1912) negative interest prevailed upon most bond and mortgage loans. For example, the purchasing power of the dollar declined about 8.2 per cent. in 1899, 8 per cent. in 1900, and 5.4 per cent. in 1906.

The losses to investors resulting from the depreciation of money are in some degree compensated

by a tendency for interest rates to advance during periods of continually rising prices. Professor Irving Fisher in his well-known book, *The Rate of Interest,* develops this point at length. Rising prices stimulate investments, make business for the time being more active, and consequently lead to an increasing demand for capital and resulting higher interest rates. The adjustment to higher interest rates, however, in the case of bonds and mortgages can ordinarily be made only upon the dates when the obligations mature, and when new contracts are being signed. Furthermore, in the interim the higher market rates of interest force down the prices of bonds whose rates of interest are fixed at the old and lower level. At best, therefore, the compensation for depreciation of principal, which the creditor receives in the form of advancing rates of interest, is only partial, and is slow of realization.

Will Prices Continue to Rise?

A knowledge of the extent to which the dollar has depreciated in the past is of historical interest to the investor, but his primary concern as a business man is the question whether it will continue to depreciate in the future and, if so, how

rapidly. The first step in any attempt to answer this question is an inquiry as to the chief cause or causes of the dollar's recent depreciation. It is with such an inquiry that the remainder of this article is concerned.

In making such an inquiry three rather elementary facts must be kept in mind.

First. Each commodity is subject to its own peculiar conditions of production and marketing and its price reflects these conditions, as well as the more general conditions relating to money and credit. Our problem is not a study of the prices of any individual commodity or group of commodities, but a study of the general price level of all classes of commodities. To explain why the prices of a number of individual commodities rise (while a number of others fall) is no more an explanation of a rising price level than is an explanation of the crests and troughs of waves an explanation of the rising level of a lake.

Second. The chief cause or causes of the rise in the general price level since 1896 are to be found in forces which were either absent or relatively ineffective during the long period extending from 1873 to 1896 during which the general price level in the United States declined about 39 per

cent., and that of England about 45 per cent. (See chart, page 25.)

Third. The chief cause or causes are presumably world-wide in their operation, for a rise in general prices during recent years has been found in every important gold-standard country of the world. The extent of this rise since 1896 in eight important countries is shown in the following table:

EXTENT TO WHICH GENERAL PRICES IN LEADING COUNTRIES OF THE WORLD WERE HIGHER IN 1910 THAN IN 1896

Country	Name of Index number used	Percentage Increase of Prices in 1910 over 1896
Belgium	Waxweiler	27
Canada	Coates	35
England	Sauerbeck	28[1]
France	Réforme Economique	31[2]
Germany	Schmitz-Hooker	42[3]
India	Atkinson	37[4]
Italy	Necco-Export Prices	21[5]
United States	Bureau of Labor	46
Average for all eight countries		33

1. If September, 1911, were compared instead of the year 1910 the increase would have been 32 per cent.
2. If September, 1911, were compared instead of the year 1910 the increase would have been 40 per cent.
3. If September, 1911, were compared instead of the year 1910 the increase would have been 54 per cent.
4. Comparison is for the year 1908, the index numbers for later years not being available.
5. Comparison is for the year 1909, the index numbers for 1910 not being available.

A reference to the table will show that while

the rise has been greatest in the United States, it has been very substantial in all the countries, and nearly as great for Germany, India, and Canada as for the United States. The average increase for the eight countries was about three-fourths of that for the United States.

Coming now to a brief consideration of some of the principal alleged causes, we may note the following: Trusts, tariff, trade unions, exhaustion of natural resources, increased gold production and improved credit facilities.

Trusts

The period in question has been one in which many trusts have been organized and in which monopoly power has been greatly extended. Trusts are in business for profit, and despite the fact that they often can produce more cheaply than smaller concerns, they frequently raise prices, or at least maintain them somewhat above what would have been competitive rates.

A study of different commodities, however, reveals the fact that the recent advance in prices is by no means limited to trust-produced articles nor to "trust-ridden" countries. Many articles exhibiting the greatest advances in price, such as

lumber and farm products, are not controlled by trusts.

Furthermore, the rise of prices in India was almost as great as that in the United States. Upon this subject we may accept the conclusion arrived at by Professor J. W. Jenks, of New York University, in his special investigation of the influence of trusts upon prices for the Massachusetts Commission on the Cost of Living. He says: "The general conclusion must be that the late great general increase in prices cannot be ascribed to the trusts, especially the prices that mainly affect the cost of living, though they are probably responsible for a small part of it."

Tariff

A second explanation often given is the tariff. The tariff may be an important reason for the higher level of prices in this country than in Europe; it probably has little weight as an explanation of the recent rise of prices in the United States. The tariff has been high ever since the Civil War. It was high during the long period of falling prices from 1873 to 1896. It was not materially changed from the Dingley Act of 1897 to the Aldrich-Payne Act of 1909. Concerning the

latter act our foremost scientific authority on the tariff, Professor F. W. Taussig, of Harvard University, says: "In sum," this act "brought no essential change in our tariff system. . . ."

Since 1897 prices have been moving upward, and the advance is just as evident in articles which do not bear effective duties as in those that do. The advance, moreover, has taken place in countries with a high tariff, like Germany and the United States, countries with a low tariff, like India, and countries with practically no tariff, like England.

Trade Unions

The increased cost of living has been attributed by many to the exactions of organized labor. These exactions may be a cause in the case of some goods. When trade unions interfere with the efficiency of labor and unreasonably restrict output, the result can only be less products, and higher prices for particular commodities. The index numbers of wages per hour "in the leading wage-working occupations of 4,169 establishments in the principal manufacturing and mechanical industries of the United States," compiled in 1908 by the United States Bureau of Labor, showed an

average increase of wages from 1896 to 1907 of 29 per cent., as contrasted with the Bureau of Labor's index numbers for prices, which showed an average increase of 43 per cent.

Prices and Wages

The argument that the demands of organized labor have been an important cause of the recent rise of general prices loses much of its apparent weight when one notes that prices have risen much more rapidly than wages. It is probably to a very considerable extent a case of "putting the cart before the horse." One would be nearer the truth in saying that the demands of organized labor for higher wages have been stimulated by rising prices and by the need of higher wages to maintain existing standards of living. Wages normally lag behind prices on an upward movement, and the demands of trade unions in many cases merely represent efforts to "take up the slack." The upward movement of prices, moreover, has taken place not only in countries like England and the United States, where labor organizations are comparatively strong, but also in countries like Germany and India, where such organizations are comparatively weak.

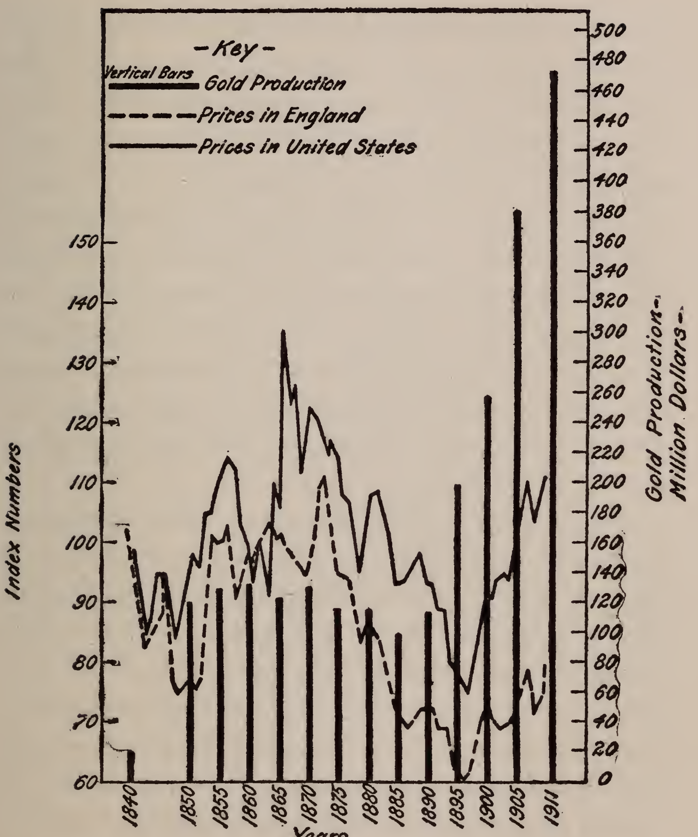
Exhaustion of Natural Resources

The exhaustion of natural resources has unquestionably been a factor in the upward movement of general prices. Our population has been increasing rapidly and making continually heavier demands upon our agricultural, mineral, and forest resources. In exploiting these resources we have been altogether too careless and wasteful. The prices of such basic commodities as foods, building materials, fuel, and the like have risen more rapidly than those for most other kinds of commodities. But the rise in prices has been limited by no means to such articles as these. It has, moreover, taken place in countries, like Germany, where great care has been taken in the conservation of natural resources.

Increased Gold Production

Another cause, and in my judgment by far the most potent one, is the recent phenomenal increase in the world's gold production.

Every price in the United States involves a comparison of the value of an article with the value of a dollar. When a farmer brings eggs to the country store to exchange for sugar he knows that the higher the value of sugar, the more eggs



The vertical bars as measured by the figures at the right represent the world's average annual gold production for the five or ten-year periods ending with the years given at the bottom. The irregular lines represent the course of prices in England and the United States. As the English and American index numbers are computed from different bases there is no significance in the fact that the curve representing English prices is almost always lower than that representing prices in the United States. The lines merely represent the relative movements from year to year of the price levels of the respective countries.

it will require to buy a ten-pound sack; he knows equally well that the lower the value of eggs, the more eggs it will require to buy the sugar. He knows that both eggs and sugar fluctuate in value according to the law of demand and supply. When, however, he pays money for goods, he always attributes a change in the price of the goods to a change in the value of the goods, although it may be due to a change in the value of money *per se*. We think of a dollar as a fixed unit of value just as a meter is a fixed unit of length, or a kilogram a fixed unit of weight. But the analogy is an incorrect one.

There is in a $10 gold piece 232.2 grains of pure gold. Anybody can take that many grains of pure gold to the mints and obtain for it a $10 gold piece, and anybody can melt down a new $10 gold piece and get from it that many grains of pure gold. A $10 gold piece is accordingly practically equivalent in value to 232.2 grains of pure gold, and a dollar is equivalent to the value of 23.22 grains of pure gold. The United States currency system is on a gold standard, and all of our different kinds of money are interchangeable with gold.

A dollar, therefore, represents the value of 23.22

grains of pure gold put up by the government in the form of coins. Anything that changes the value of gold changes the value of a dollar, and tends to change the price of every article quoted in terms of dollars; that is, the price of everything which is bought and sold. But gold, like other commodities, obeys the law of demand and supply.

A reference to the accompanying chart on page 25 shows the movement of the world's gold production since 1820. The chart shows the great increase at the time of the Californian and Australian gold discoveries of the middle of the last century, the tendency for gold production to decline about 1860 to about 1890, at a time when the movement of many countries from a silver standard or bimetallic standard of currency to a gold standard was leading to a greatly increased demand for the yellow metal; and finally it shows the steady and phenomenal increase in production since the early nineties.

The average annual production by 5-year periods since 1891 has been as follows:

Period	Millions of Dollars	Thousands of Ounces
1891–1895	163	7,880
1896–1900	257	12,450
1901–1905	323	15,610
1905–1910	434	20,980

The world's production of gold in 1910 was over 3½ times as large as in 1870, over 4½ times as large as in 1880, more than 3⅘ times as large as in 1890, and 78 per cent. larger than in 1900.

Gold is a durable commodity and its annual product is not used up, like that of wheat, from year to year. On the contrary, the world's stock is an accumulation of ages. The enormous gold production each year during the last decade and a half has greatly increased the world's available supply, and as the demand, though greatly increased, has not kept pace with the supply, the value of gold has fallen—in other words, the price levels in all gold-standard countries throughout the world have risen.

The present advance in prices is in many respects a repetition of what happened at the time of the great Californian and Australian gold discoveries in the latter '40's and early '50's. (See chart.) Then as now people were greatly concerned with the rising cost of living. All sorts of explanations were given at the time, but the verdict of history seems to be that the chief cause was the greatly increased gold production. This rise in prices about the middle of the last century was

followed, as we have seen, by a long period of falling prices, when the supply of gold did not keep pace with the demand. The evils of this long period of falling prices led to the great controversy over bimetallism. About 1897 the gold production in South Africa turned the tide of prices from a falling one to a rising one, and since that time we have heard little of bimetallism, but much of the rising cost of living.

Improved Credit Facilities and Increased Rate of Monetary Turnover

The last important factors in the recent rise of prices to be considered are improved credit facilities and the increasing rate of monetary turnover. Any commodity tends to decline in value when less expensive substitutes are used in its place. The last decade and a half has witnessed a remarkable development in the use of credit as a means of payment; our banking power has much more than doubled, checks are being used to an increasing degree as media of exchange, and our bank note circulation increased from $200,000,000 to nearly $700,000,000 between 1895 and 1910. Similar developments, although in most

cases not so rapid, have been taking place in many other countries.

If money turns over more rapidly it is obvious that a given amount will do more money work. A million dollars with an average rate of turnover of 20 will perform $20,000,000 of money work in a year, while if its rate of turnover is doubled it will perform $40,000,000 of money work. That increase of money work may be represented by the exchange of the same amount of commodities at a higher price level or of a larger amount of commodities at the same price level, etc. Professor Irving Fisher, of Yale University, in his book, *The Purchasing Power of Money,* estimates that the rate of monetary turnover increased about 12 per cent. from 1896 to 1909.

We have, therefore, the situation of a more efficient use of money, and a rapid development of the use of effective money substitutes, at a time when the mines are pouring out the standard money metal as never before.

A Word as to the Future

Two forces appear likely to exert a strong influence, for some time to come, in the direction of higher price levels:

One force is a continuation of the present large and increasing gold production. Known gold deposits are still enormous and new gold fields may be discovered; while improvements in methods of mining and metallurgy are making it profitable to work poorer and poorer ores. Much of the world's gold to-day is being obtained from ores which would have been discarded as worthless a generation ago.

The other force is the improvement of our monetary and banking mechanism in such ways as to increase the efficiency of money—a result equivalent in its influence on prices to an increase in the supply of money. We may reasonably expect the rate of monetary and of deposit turnover to increase in the future, we may expect a more extensive use of checks in place of cash by the public, and we may expect a higher degree of centralization and of efficiency in our American banking business. All of this will tend to cheapen gold.

It is true, there are certain general forces which will tend to increase the value of gold. Space will merely permit the mention of a few important ones: (1) As population and trade increase there will be an increased demand for circulating

media; (2) as the world's existing supply of gold increases a given annual product will represent a smaller and smaller percentage of the total supply. A cup of water poured into a small pail will raise the level of the water in the pail much more than will the same cup of water poured into a large pail. (3) As the best gold deposits are worked and it becomes necessary to resort to poorer mines and more inaccessible veins, the cost of mining gold will increase. Furthermore, as prices rise, the cost of labor, machinery, chemicals, etc., used in gold production will continue to increase, while gold enjoys the distinction of being the only commodity (in gold-standard countries) whose price remains constant.

It is dangerous to prophesy as to what will be the resultant of these forces (and numerous others that might be mentioned), some working in one direction and some in the other; it seems, to the writer, probable, however, that we may reasonably expect a continuation of rising prices for some years to come; rising prices, however, accompanied by temporary reactions in the form of commercial crises and depressions similar to the ones we have recently experienced.

CHAPTER III

RISING PRICES AND INVESTMENTS

BY HARRY GUNNISON BROWN, PH.D.

Assistant Professor of Political Economy, Yale University

CHAPTER III

Rising Prices and Investments

ONE of the most discussed phenomena of recent years is the tremendous rise in the cost of living. The increase of prices has not been peculiar to the United States, but has been world wide in its reach. The following index figures of the Bureau of Labor, for the United States, and those of Sauerbeck, of England, show us with perhaps the greatest exactness at present attainable, the extent of the rise in average prices, and therefore of the depreciation of money since 1896:

Year	United States	England
1896	90.4	61
1897	89.7	62
1898	93.4	64
1899	101.7	68
1900	110.5	75
1901	108.5	70
1902	112.9	69
1903	113.6	69
1904	113	70
1905	115.9	72
1906	122.5	77
1907	129.5	80
1908	122.8	73
1909	126.5	74
1910	131.6	78

This rise of prices is generally attributed, and, it would seem, rightly so, to the enormously increased production of gold during the last two decades and the consequent increase in the monetary and credit media of exchange. Professor Kemmerer, of Princeton University, in his book on *Money and Credit Instruments in Their Relation to General Prices,* and Professor Irving Fisher, of Yale, in *The Purchasing Power of Money,* have given to this subject a more exact mathematical statement than it had hitherto received, but economists generally have long recognized a relation between the quantity of money and the average of prices.

Importance of Rising Prices to the Investor

This recent depreciation of money would be of no importance to any of us if money incomes all changed alike and by just the same amount as prices generally, that is, if our incomes increased automatically as prices increase. But such is not the case. Wages and salaries are likely to be adjusted too slowly to a changing value of money, and the same tardiness of adjustment, perhaps a greater, is found in the case of certain classes of investments. It is these facts which give to the

subject its very great practical interest to nearly everyone, to those who get money incomes in the form of wages and salaries and *no less to those who derive their incomes in whole or in part from invested capital.* The former class are often, individually, unable to avoid loss from rising prices, though sometimes, by organization, they may succeed in making money wages almost keep pace with prices of goods.

But the individual investor is not thus helpless. In so far as he has occasion to make new investments, he can put his capital where it will perhaps yield him more rather than less because of the changing level of prices; and *even his past mistakes may be, in part, rectified* by the investor who realizes the effects of a depreciating standard, since those who do not realize these effects are ready to take the less prospectively profitable securities off his hands, leaving him free to reinvest more wisely.

The Two Main Classes of Investments

Generally speaking, investments are of two classes, depending upon the constancy or the variability of the expected return. In the one class are short-term notes, mortgages, bonds, preferred stock,

etc., yielding a fixed per cent. on investment. In the other class are investments such as common stocks and industrial or commercial enterprises under the direct control of the investor. These yield returns not fixed in advance by agreement but dependent, in each case, upon the earnings of the business. Investments of the latter class are not affected in the same way as those of the former, by changing prices. Investors in the former class of securities, i. e., investors receiving stipulated rates of return, are of the lending or creditor classes or are in an analogous position. The other class of investors, if the companies in which they are interested have outstanding bonds or other obligations of a similar nature, are essentially borrowers or in the position of borrowers. In general, the lending class gains when prices are falling and loses when prices are rising; the borrowing class gains when prices are rising and loses when they are falling.

In other words, if you buy the bonds of a certain company, you are really lending money to that company and you are limited to a fixed rate of interest as long as the loan stands, even though values increase and the buying power of that fixed return depreciates. On the other hand, if you

buy the stock of that company, you, as one of the owners, are really borrowing money of those who buy your bonds. Therefore, as values increase and the worth of the interest you pay decreases, you gain to the same extent that the bondholder loses.

Rising Prices and Interest Rates

In order that borrowers and lenders should find themselves in the same position relatively to each other when prices have been rising or falling, i. e., when money has been depreciating or appreciating, the rate of interest on loans would have to be adjusted to these conditions. Suppose, for instance, that prices increase 5 per cent. in a year, which is simply another way of saying that money depreciates 5 per cent. in a year. That means that a man who had lent $100 for the year at 4 per cent., getting back $104 at the end of the year, would lose over 1 per cent. in real value. The $100 or so-called principal has lost 5 per cent. of its purchasing power during the year. The 4 per cent. nominal interest is not enough to compensate for the 5 per cent. loss in purchasing power, even when we overlook the fact that the $4 interest, as well as the principal, is affected by the deprecia-

tion of money. Usually the loss from year to year is not so great as this, though in some years it is even greater. In 1899, for example, money depreciated 8.2 per cent. That year, the person who loaned money at 4 per cent., instead of realizing a profit actually lost more than 4 per cent. on the investment.

The writer has in mind the case of a man who loaned a considerable sum of money in the early or middle nineties, on farm mortgage security, at 3 per cent. interest. Since 1896 money has depreciated at the rate of 2.4 per cent. a year. This man, therefore, has actually realized, since that year, scarcely more than ½ per cent. a year on his loan. Certainly, had he been able to foresee the situation, he would have been likely to insist on a higher rate.

If borrowers and lenders are to be in anything like the same relative position, interest should be proportionately higher when money is depreciating, that is, when prices are rising. Thus, if interest is normally 5 per cent. a year and money is depreciating 3 per cent. a year, the interest charge could fairly be about 8 per cent. without there being any undue or unusual profit to the lender or any undue hardship for the borrower.

To the extent that this adjustment is not made, the borrower gains and the lender loses. Reversely, if money is appreciating in value, the lender gains and the borower loses.

The Varying Value of Interest

To what exent is appreciation of money balanced by a lower rate of interest, or depreciation of money by higher interest? Only to a small degree. So largely is the dollar looked upon as a settled and unchangeable standard, so little is its variability in purchasing power practically considered, despite plentiful evidence of this variability, that the adjustment of interest rates to the changing value of money seems almost negligible. The difficulty is the greater, because, even when all these possibilities are borne in mind, we cannot be absolutely certain how or to what extent money will change in value over either a long or a short future period. We may expect, for instance, a continued depreciation, but we cannot be sure of it or of its extent and continuance.

In *The Rate of Interest,* Professor Fisher has set forth numerous statistical data which seem to show, in the aggregate, some tendency toward adjustment of interest to price changes. If money

is depreciating there is some tendency for interest to rise, and if it is appreciating, for it to fall. But this rule, if true for a majority of cases, is also subject to numerous exceptions. And even when there is adjustment, it is exceedingly slight. The following figures (from Irving Fisher's *The Rate of Interest,* brought down through 1910 by compilations from the *Financial Review* and the *Economist*), giving interest rates, appreciation and depreciation of money, and virtual interest (i. e., interest realized in actual purchasing power), show to how small a degree money rates of interest change and how great, therefore, are the differences realized in virtual interest when prices are rising and when they are falling:

New York Rates of Interest in Relation to Rising and Falling Prices. Taken from Prime Two-Name 60-Day and 90-Day Paper

Years	Per Cent. Interest	Per Cent. Appreciation (+) or Depreciation (—) of Money	Per Cent. Virtual Interest
1875–1879......	5.1	+7.9	+13.0
1880–1884......	5.4	+0.6	+ 6.0
1885–1891......	5.1	—0.2	+ 4.9
1892–1897......	4.6	+5.6	+10.2
1898–1906......	4.6	—3.5	+ 1.1
1907–1910......	4.9	—0.5	+ 4.4
1875–1896......	5.1	+2.6	+ 7.7
1897–1910......	4.6	—2.4	+ 2.2

Bank of England Rates of Interest in Relation to Rising and Falling Prices

Years	Per Cent. Interest	Per Cent. Appreciation (+) or Depreciation(—) of Money	Per Cent. Virtual Interest
1874–1879......	3.2	+4.3	+7.5
1880–1887......	3.3	+3.8	+7.1
1888–1890......	3.8	—1.4	+2.4
1891–1896......	2.5	+3.4	+5.9
1897–1900......	3.2	—6.6	—3.4
1901–1906......	3.6	—1.5	+2.1
1907–1910......	3.7	—0.9	+2.8
1897–1910......	3.5	—1.6	+1.9

Obviously, then, the relatively few investors who fully realize the situation cannot, because of the fact that money is depreciating, get higher rates of interest on loans. As long as the great mass of investors are willing to lend at ordinary rates, the few who are not willing to, cannot, merely on that account, get more.

But they need not be lenders. If one anticipates an average depreciation of money, during the period of investment, of 2 per cent. a year, and can get only 3 per cent. interest, e. g., on a mortgage investment, he would better not make it at all. An alternative to lending is to invest the money in an enterprise under one's own direction or in any form which entitles one to a share in the

profits of an enterprise instead of to a fixed sum, for example, to buy land and homes and rent them.

Bonds vs. Stocks as Investments

The same argument would favor investment in stocks rather than in bonds during periods of money depreciation (rising prices). In the quotation supplement of the *Commercial and Financial Chronicle* for January 4, 1902, 4½ per cent. bonds of the Philadelphia & Reading Railroad, maturing in 1910, were quoted at 110. The principal, due in 1910, was $100, and this, together with the last year's accrued interest, would make $104.50 due in that year. Yet that amount in 1910 would buy no more than $89.66 would buy in 1902, money having depreciated 14.2 per cent. Similarly, the $4.50 of interest due in 1909 was equivalent in purchasing power only to $4.02 in 1902, while the interest due in 1908 was equivalent to $4.05 in 1902. Would an investor who foresaw the depreciation of money have been willing to give $110 in 1902?

Again, first mortgage 4½ per cent. gold bonds of the Pennsylvania Company, due in 1921, were quoted for January, 1902, at 114 to 114½. But if money depreciates until 1921 at the same rate

as since 1902 (which, of course, it very likely will not) it will then have lost 33.7 per cent. of its purchasing power. Hence, the $104.50 due in 1921 will have a purchasing power equal to $69.28 in 1902. In that case was the bond really worth $114 in 1902?

When Bonds Are Profitable

It may sometimes be worth while to invest in bonds even when money is depreciating, if one happens to know of bonds paying a fair rate of interest and which, because the investing world does not appreciate their goodness, are selling at a low price. But the man who takes due account of changes in the value of money will not, when money is depreciating, be willing to pay as much for bonds in general as the average investor. If an investor bears in mind, for example, an expected annual depreciation in money of 4 per cent., and if, otherwise, he would consider 5 per cent. a fair return on bonds of the security in question, he will not be willing to pay for the bonds a price higher than will give him 9 per cent. on his actual investment. What this price will be can be found from bond tables or may be arrived at by discounting each annual installment of interest and prin-

cipal at 9 per cent. and compounding in each case according to the number of years to be waited.

As the average investor, overlooking the probable depreciation of the dollar, will be willing to pay a higher price than the far-seeing investor can afford, the latter is generally obliged to turn to some other form of investment. In a period of rising prices he will find that it does not *pay* to be a creditor, either as mortgagee or bondholder. He will desire some use of his capital which will yield him a share of the profits dependent upon the prosperity of the business. If, therefore, he does not care to invest the money in business under his own personal direction, he will prefer putting it into good corporation stocks. He will not invest in bonds unless they are convertible into stock, or carry a stock bonus, or for other special reasons.

An Example of Stock Profits

In order to see what is the relative position of stock and bond holders, during periods of rising prices, let us assume a rise of 20 per cent. A certain business (a corporation) has had invested in it $100,000,000. Of this total, $75,000,000 has been contributed by bondholders at 5 per cent., who are therefore creditors for that amount. The

other $25,000,000 has been contributed by stockholders. Before the rise of prices occurred, its expenses for labor and materials were $25,000,000 a year; its gross profits were $30,000,000. Its net profits were $5,000,000, or 5 per cent. on the total investment, thus giving the same return to both classes of investors.

The 20 per cent. rise of prices has meant that its running expenses are $30,000,000 instead of $25,000,000. But as it has been able to raise the prices of its own goods in the same proportion the gross profits are now $36,000,000. The net profits are therefore $6,000,000. They have increased by 20 per cent., the exact degree by which prices in general have risen. Therefore, *in purchasing power over goods,* the earnings of the company are *neither better nor worse than before.* The value of the investment will now be $120,000,000 instead of $100,000,000, because though representing no more capital, it represents also no less, and is measured in a cheaper dollar.

If the total investment had come from shareholders, the rise of prices, provided it affected expenses and gross profits equally, as in this case, would signify nothing. *But three-quarters of the investment has been provided by bondholders.*

No matter that the profits are now $6,000,000; no matter that money has depreciated and 20 per cent. more is required to purchase the same goods. The bondholders are entitled *only to 5 per cent. interest* on $75,000,000 and this is $3,750,000. It is worth considerably less than its former purchasing power. The shareholders get *not only enough* more money to compensate for the 20 per cent. rise of prices *but also the 20 per cent. which the bondholders cannot get.*

How Value of Stock Increases

The bondholders continue to get 5 per cent. on their original investment. The stockholders now get $2,250,000 on an original investment of $25,000,000, that is, 9 per cent. But the value of the business has increased 20 per cent. measured in money, and is now $120,000,000. Of this, the bondholders may be regarded as possessing a claim to $75,000,000, for despite the depreciation of money, they are entitled only to the agreed 5 per cent. of that and to that amount itself at maturity. Hence, the value of the stock is, rightly speaking, $45,000,000, *an increase in value of 80 per cent., in the same proportion as the increase of dividends.*

Had the situation been clearly foreseen by investors, the bonds would have sold considerably below and the stock considerably above par; and even now, we have not shown the full gain likely to have accrued to shareholders, since, in general, wages rise more slowly than prices. The net profits, therefore, are likely to increase by *more* than 20 per cent. and *all of this increase goes to the shareholders.*

The same objection which applies to bonds as investments during periods of rising prices, applies also, in large part, to those preferred stocks which have a fixed dividend limit. This objection may apply also, in some degree, even to the common stocks of public service corporations such as railroads, street railways, and lighting companies. In so far as the rates charged by these corporations are subject to legal regulation, these rates may be prevented from increasing to the same extent as other prices.

If rise of money prices can mean no increase of money return to investors, then the investment is not the most profitable one. It should be added, also, that the objection against bonds does not tell equally against *convertible* bonds. If bonds can be converted into stock at will, then any special

profit which changed conditions give to stockholders can be shared by bondholders.

Needless to say, the suggestion that stocks are better investments than bonds when money is depreciating, does not mean that anyone who learns this fact can immediately acquire riches by such investment. There are stocks and stocks, i. e., there are sound stocks and wild-cat stocks. The investor cannot hope to choose wisely unless he knows detailed facts about special securities, but it is something gained to have a well-based preference as to the *kind* of securities most profitable.

Further Price Increase Probable

We have considered so far the way in which changes in the value of money affect different securities as desirable investments. But of what avail is it to tell a man that if prices are going to rise stocks are a better investment than bonds, unless he can also determine in advance whether prices are likely to rise or fall? As a matter of fact, no one can tell in advance, with certainty, whether they will do the one or the other. To-day, statistics seem to show a steady increase and a rapid one, year by year, in the annual gold production. This fact points toward a continuance of

rising prices for several years. Yet it must be remembered that a very large annual production of gold, unless increasing from year to year, would not indefinitely raise prices. Each year the total stock of money would become larger, and each year, therefore, the new additions would probably be a smaller per cent. of the total.

In consequence, if the growth of business should involve a corresponding increase in the demand for money, prices would soon cease to rise. Then again, disturbance of peace in gold-producing regions may interrupt production, and sudden failure of business confidence may cause collapse of credit and temporary fall of prices.

Conclusion

All we can say is that present knowledge points toward a large and probably increasing gold production for a number of years, that there has been a considerable rise of prices since 1897, and that there is likely to be some further rise. It is probable, therefore, that holders of stock will gain some advantage over the creditors of their respective corporations, although, if a fall of prices should set in, the reverse would be the case. But investors in enterprises which have no creditors,

where, for example, if the enterprises are in the corporate form, the entire capital is furnished by purchasers of common stock, will probably be less affected either for better or worse by prospective changes in the value of money.

CHAPTER IV

BONDS AS AN INVESTMENT WHEN PRICES ARE RISING

BY WALTER E. CLARK, PH.D.

Professor of Economics, the College of the City of New York

CHAPTER IV

Bonds as an Investment When Prices Are Rising

THAT general commodity prices have been rising since 1897, and that the basic cause of this rise is the cheapening of gold, are two scientifically established propositions.

A third proposition of great moment to all investors grows out of the facts and the reasoning supporting these first two. This proposition is: Commodity prices will probably continue their generally upward trend for many years to come.

This third proposition is so necessary to the main theme of this article that the line of reasoning which makes it a scientific prophecy and not a mere blind guess at the future, needs to be indicated before the main theme is developed.

Will Prices Continue to Rise?

Accepting the first two propositions cited above, it follows that if general commodity prices are to stand still or to decline steadily in the future, it

will be because gold appreciates in value. But gold is a commodity. It is subject to the regular economic law of value. If it is to appreciate in the future, then either its supply must increase less rapidly, or demand for it must increase more rapidly, than in the past fifteen years.

To decrease the supply of gold or to increase demand for it, some such condition as the following must obtain:

(1) The world's annual output of gold must stand still or grow steadily smaller in the coming years.

(2) The general means for transportation and exchange must cease to progress or must positively decline in efficieney.

(3) The volume of business exchange must increase far more rapidly than in the past.

Consider in order, the probabilities that these conditions will appear in the near future:

(1) Will the world's annual gold output diminish?

Facts seem clearly to indicate the contrary. This output has steadily increased for 21 years past, excepting only the years 1900 to 1902, when the Boer War suspended mining in South Africa. Through this steady increase the world's annual

output has risen from $118,000,000 in 1890 to $466,000,000 in 1911.

If known gold fields were to be exhausted, and if mines now worked were to be abandoned as unprofitable, because gold was growing cheaper, then the world's annual gold output would decrease, provided no new mines were developed. But consideration of the South African and of the American gold fields makes this improbable.

In 1904 an expert estimated that the definitely known and accessible gold yet unmined, in South Africa alone, was worth over $12,000,000,000. The new processes for securing gold make it profitable to work ores yielding less than one-half the average present yield per ton of the South African field. These two facts—huge supply in sight and wide margin of profit safety—make it altogether probable that South Africa, already producing more than one-third of the world's annual gold output, will steadily increase its gold production for many years to come.

Gold Output Certain to Increase

The great American ranges of mountains, extending from the Behring Sea to Cape Horn, are already producing gold in hundreds of places.

Their gold-producing possibilities are yet far from maximum development. Within the past fifteen years two notable new gold fields have been here developed, while the introduction of the cheaper mining and extractive processes has caused the profitable working of formerly abandoned mines. It is altogether probable that, within the coming generation, this 9,000-mile stretch of gold-hearted American mountains will increase its annual output far beyond the $150,000,000 which it now produces.

It probably needs only the application of more capital and of the newer methods to make great Asia, with its widely scattered and, in the main, primitively developed gold deposits in India, in China, in Siberia, a full rival of Africa and America as a gold-producer.

There still remains nearly 10 per cent. of loss in the extraction of gold from refractory ores. Coming years may reduce this ratio of loss, as they will surely extend the application of the best and cheapest processes to a much greater part of the gold-producing area.

These facts of steadily rising world annual gold output, of richness and extent of known gold deposits, added to these probabilities of the discov-

ery of new fields, the invention of more perfect and cheaper mining and ore-extracting methods, and the application of latest methods to thus far primitively worked fields, make a strong case for the long continuance of the steady increase in the world's annual gold output.

(2) Will progress in transportation and exchange cease?

This is an age of concentration, of emphasis upon efficiency, and of multiplying inventions. Means of transportation and communication, systems of credit, of accountancy, and of exchange generally, will certainly continue to be improved steadily. Every such improvement will enable a given amount of gold to do more work. This will further cheapen gold.

(3) Will the future business volume increase more rapidly than in the past?

There seems to be no reason for expecting more rapid increase in the total volume of world exchanges than has been occurring during the past fifteen years. Such factors as lessening rates of population increase, rapid exploitation of virgin natural resources, and shifting of social emphasis from production to distribution of wealth, seem to point the other way.

It seems, then, to be strongly probable that annual world gold output will steadily increase, that exchange means will be more perfect, and that volume of business will not increase any more rapidly than in recent years. Such probabilities justify the prophecy that commodity prices will continue to rise generally for many years to come.

Granting, then, that commodity prices will continue to rise generally, every investor needs to consider the effects of rising prices upon bonds, stocks, realty, and business generally. It is the purpose of the remainder of this article to consider bonds as a form of investment in a rising-price era.

Attention will be confined to bonds pure and simple, since a later chapter in this book will deal with the subject of bonds accompanied by a stock bonus.

The Theory of Bond Values During a Rising-Price Era

A Bond has been well defined as "a promise to pay *a definite sum* of money at a definite future date, with *interest at a fixed rate* payable at stated intervals in the meantime." The italics indicate

the significant things for our immediate consideration. What we seek to know is the effect of rising prices upon fixed sums of money due in the future. An illustration will show this effect most clearly.

Suppose that an investor pays par value for a $1,000 bond bearing 4 per cent. interest. If during the following year prices rise 2½ per cent. (about the actual compounding annual average rise for the past 15 years) the investor must have $1,025 at the end of the year to have the same purchasing power which his $1,000 represented at the beginning of the year. But, supposing that, at the end of the year, he can still get $1,000 for his bond, he will then have $1,040, principal and interest. This is $40 more money, *but only $15 more purchasing power than he had at the beginning of the year.* And this $15 will not buy so much as $15 would have bought then! Furthermore he probably could not get the full $1,000 for his bond. Allowing, then, for his loss in purchasing power as to both principal and interest, *he has received less than* 1½ *per cent., instead of* 4 *per cent., on his invested capital.*

This simple illustration tells the whole story. The principle involved is that a general rise in

prices lowers the *real* income of those whose income in dollars and cents is fixed. It must be emphasized that this principle applies as much to the whole sum paid in the redemption of a bond, at maturity, as it does to the periodic sums paid in interest. Both kinds of payments are fixed sums and therefore have decreasing purchasing powers as the years of a rising-price era pass.

Why Bond Values Fall

Further, it is to be noted that a rising-price period brings business prosperity. Business profits, the current interest rate, and rents, all tend to rise. Therefore those forms of investment which continue to yield a fixed income tend to be discounted. Bonds, yielding continuously the same dollar and cent income, tend to fall in market value.

In this connection it is worthy of attention that this effect of rising prices upon bonds is somewhat enhanced in the case of premium bonds, and somewhat retarded in the case of discount bonds. That is, if the investor in bonds pays more than par for his bonds the premium is slowly written off from the market value of the bond as it approaches maturity. On the other hand, the bond bought below

par slowly appreciates toward par as it matures. It is all too common among investors, and among bond dealers, too, to consider only the market quotation and the rate of interest on a bond, and to neglect altogether the fact that it will be redeemed at par when matured. Really conservative investors will not neglect this item, except in the case of very long time bonds. For example, one considering investment in *West Shore 1sts,* due to mature in the year 2361, may safely neglect it.

Do the facts of the recent period of rise in prices bear out this theory of lowering bond values?

Bonds issued by great nations are not so subject to value variations due to business vicissitudes as are bonds issued by corporations. Government bond quotations are therefore generally a safer and truer index for general price variations than are corporation bond quotations.

United States Government Bonds are something of an exception to this rule. They have a very artificially sustained price since national banks must buy them. Yet even these bonds show a decline in market value. If the 2 per cent. bonds of 1930 be chosen for illustration the average annual net prices are:

UNITED STATES GOVERNMENT 2'S OF 1930. AVERAGE ANNUAL QUOTATIONS

1900	104.04	1906	103.95
1901	107.30	1907	105.18
1902	108.78	1908	103.93
1903	107.09	1909	101.47
1904	104.99	1910	100.87
1905	104.16	1911	100.63*

Steady and still greater declines are shown by the leading government securities of Great Britain, Germany, and France. English Consols were quoted at 90.75 in 1903, the first year of the 2½ per cent. rate, and at 73 in October, 1912. German Imperial loans were quoted: the 3½'s, at 104.58 in 1896, and at 93.17 in 1910, and the 3's at 99.22 in 1896, and at 84.41 in 1910. The French Rentes 3's, in their long history, give a striking double illustration of *the inverse relation of general prices and bond values.* Average annual net prices for three years, only, are quoted to save space necessary for the entire table:

FRENCH RENTES—AVERAGE ANNUAL NET PRICES

1879	79.64
1897	102.95
1912 (April)	92.70

With intermittent changes, notable in all securities, if listed day by day, these Rentes *rose* steadily from 1879 to 1897 when they were *high-*

* The last quotation is obtained by averaging the high and low for 1911. The last sale for 1911 occurred November 21, at 100.125.

est, and as steadily they have *declined* ever since, registering their lowest price, since 1897, in April of 1912. The double illustration appears when this course of Rentes prices is compared with the course of general commodity prices, having in mind that the general commodity prices fairly steadily *declined* from 1879 until 1896-97, when they were *lowest,* and that they have steadily *mounted* ever since.

The value of securities issued by private business corporations are so responsive to the ups and downs of trade, so sensitive to the chance effects of new inventions or new legislation, so dependent upon the business intelligence and integrity of particular men in charge of the corporations, that it is difficult clearly to connect variations in the value of private corporation bonds and the course of general prices. The vast varying volume* of bond issues and cancellations by such corporations, changing the supply so greatly, is another complicating factor. Yet it is of interest to note that the general trend of corporation bond prices seems to accord with the theory.

* The values of bond issues for the year 1911, as compiled by the *Journal of Commerce,* were: Railroad bonds, $670,814,900; Industrial bonds, $322,094,000.

Decline in Railroad Bonds

The *Wall Street Journal* has published from time to time a chart of the course of prices of 25 representative railroad bonds. This study covers the past 7 years only, but, even in that half of the whole period of steadily rising prices, the factual returns correspond to the theory set forth above. Prices are quoted in monthly averages for the 25 railroad bonds. Taking the averages for January 1, of each year, as illustrative of the whole table, we get:

Averaged Quotations for 25 Representative Railroad Bonds as for January 1st of Each Year

1906	97.915	1910	92.84
1907	94.14	1911	91.43
1908	88.665	1912	90.945
1909	93.715	1912 (March)	90.825

Perhaps the table needs no further comment than that made by its author in connection with one issue of his table: "With the exception of the year of the crash, the past 6 years have shown consistent declension of bond values. Whether this fact be wholly explainable by the decreased purchasing power of gold, due to the increasing output of the metal, or in part, by some other cause, the fact remains and is incontrovertible. There have been sharp rises following sharper de-

clines, and the course of prices has not adhered to any fixed angle of declension, but description of a line along the broad stretches of the market averages demonstrates incontestably the falling values of securities." (*Wall Street Journal,* October 20, 1911.)

Staple municipal and industrial bonds show the same general tendency as the railway bonds. Marked exceptions which occur can usually be explained by special conditions in the particular issuing corporations or the particular industry involved. For example, as a class public service corporation bonds other than tractions show notable rises in average prices. Such corporations were regarded as speculative fledglings 10 or 12 years ago. So many of these corporations have, in the meantime, earned good standing with investors, that the demand for their bonds has been relatively large. It is this change in the general status of these corporations that explains them, as a seemingly notable exception to the rule of declining prices for the various classes of bonds.

Both the deductive and the factual study seem to establish the proposition that, in the last 15 years of generally rising prices, bonds have tended

to decline in value. Theory and facts thus seem to justify the prophecy that the coming years of further rise in general prices will bring with them further declines in bond values generally.

Reasons for Bond Investment During a Rising-Price Era

Accepting the above conclusions, two questions at once follow:

(1) Should the intelligent investor still cling to bonds, but insist that he be given option to convert his bonds into stock, or that he be given direct bonus of stock with each bond purchased?

(2) Should the investor altogether shun bonds and turn to stock, or invest directly in realty or business ventures?

Since the first question is to be dealt with in a later chapter in this book, it is passed here with the mere comment that opportunity for stock sharings, in the case of unusual gains, combined with the solid advantage of bond security seems to be a happy combination.

As between bonds and stocks, or as between bonds and direct acceptance of realty or business partnership hazards, the investor will weigh carefully obvious advantages of bonds:

Safety and Regular Income

(1) High-grade bonds are a safe and care-free investment in respect to both interest and principal payments. In time of business stress or liquidation, stockholders must lose all before bondholders lose anything, either in principal or interest.

In return for this high-grade security and this freedom from business hazards in respect to both the principal and interest, the bondholder is satisfied with a lower rate of return than he would demand if he were assuming greater risks. It is true that this income is not increased in prosperous time, whatever may be the increase of earnings of the issuing company. It is also true, in perhaps full offset, in the long run, for the average investor, that his income, short of the bankruptcy of the company issuing his bonds, is not decreased, whatever the extent and duration of business depression. Stability and regularity of income are notable advantages of bonds.

Stability of Value

(2) High-grade bonds are stable in value. In business stress or prosperity they change in value slowly and slightly, compared with most other forms of property. Even their value-change, due

to steadily rising prices, is slow and partial. This is due in part to the inertia, and in part to the loyalty, of bond investors. Many large investors, such as insurance companies, savings banks, and trustees generally, are largely limited by law to bond investments. Other investors are loyal to bonds because they choose their investments primarily for security of principal and for regularity and stability of income.

For examples of the relative value stability of bonds and stocks, compare the quotations of bonds and stocks of two great railways:

Railway	Security	Quotations between 1900 and 1911		Quotations in 1911	
		Low	High	Low	High
Reading	Bond—Gen'l 4s (1997)	86½	104½	96¾	98⅓
	Stock 1st Pref.	49	97	88	92
	Stock 2d Pref.	23⅝	117½	87½	101
	Stock Common.	15	173⅜	134	161⅞
Penna.	Bonds — Consol. 4s (1948).	100	105½	102	104⅛
	Stock.	103½	170	118⅜	130⅛

Shifting from Bonds to Stock

(3) High-grade bonds, because of merits already mentioned, are negotiable any time for approximately what the investor paid for them, or

they will readily be accepted as security for a loan to an amount representing a large proportion of their market value. This is an important consideration to the Simon-pure investor. Personal emergency may make it urgent that he realize on his holdings within a limited time. It is a still more important consideration to the investor who is alert for opportunity to increase his capital by a change from bonds to stock, or the reverse, when considerable gain is possible. And this has particular application to a period of rising prices. Such an investor will keep his capital in the high-grade listed bonds while prices rise. The larger returns possibly offering in stocks are no temptation to him. He bides the time of panic and depression.

After the panic slaughters the prices of good stocks this investor realizes on his bonds, getting slightly less, if anything less, than the sum he paid for them, and he invests in good stocks at bargain-counter prices. When the rally comes—it may be months, or even a year or two—the good stock will again be quoted at high levels. Oftentimes, in the speculative folly of a wild bull movement, many stocks will be quoted at prices netting, through their regular dividends, a less percentage

of income than good bonds afford. This is the time to transfer back to the high-grade listed bonds, with a principal increased by the percentage of rise in the value of the stock.

The investor who has the solid judgment and the winning patience to follow such a plan has convincing reasons for keeping his capital in high-grade bonds, even during a period of soaring commodity prices. Over-confident business extension and optimistic credit distension, the fellow travelers of very high prices, are also the monitors of the coming panic time. Then the wise man, who keeps his capital in listed, instantly negotiable, relative non-shrinkable, high-grade bonds, until the panic comes, will have opportunity to buy good stocks at prices so low that the speculative risk is negligible.

(4) Finally, it is clear that the investor, pure and simple, may find in good bonds fairly permanent placement for his capital, with ample security for both principal and income, without being compelled to accept only 3½ or 4 per cent. returns. In this period of rising prices security-issuing corporations recognize the tendency of the investing public to desert bonds. They are being forced to issue bonds which yield 4½ to 5½ per cent. on

the market price. The permanent investor who can find a good bond, selling at less than par, which will net him 4½ per cent. or better on his investment, will have a double offset for the rising prices. He will be getting the higher income rate on his investment only because the high-price era has forced the bond issuer to concede this, and he also will gain the margin between par and the price he paid as the bond matures.

Conclusion and Summary

In summary this article has aimed to show:

(1) That commodity prices will continue to rise generally for many years.

(2) That rising commodity prices mean lessened purchasing power for fixed incomes and fixed principal payments.

(3) That bond values decline generally in a rising-price period.

(4) That bonds have important advantages which entitle them to careful consideration by prospective investors, even in a period of rising prices.

CHAPTER V

STOCKS AS AN INVESTMENT WHEN PRICES ARE RISING

BY J. PEASE NORTON, PH.D.

Chairman of the Economic Section and Vice-President of the American Association for the Advancement of Science

CHAPTER V

Stocks as an Investment When Prices are Rising

IN a consideration of the subject, Stocks as an Investment When Prices are Rising, the first question which is naturally presented to the mind is the following inquiry: Have stocks gone up in periods during which commodity prices have made sustained advances? The attempt to answer this inquiry is met by a condition. The statistical records upon which dependence must be placed are quite limited. It is true that some of the foreign index numbers of commodity prices go back almost a century, but the early records are hardly trustworthy and the statistics do not apply to American conditions. Most of the index numbers of commodity prices begin in the early nineties.

It is hopeless, therefore, to attempt to go back earlier than 1890 in a comparison of this kind. The sharp rise in commodity prices in the United States commenced in 1897. The *Wall Street Journal* averages of stock prices may be said to

go back satisfactorily to this date. Consequently, where we should have several 20- or 30-year periods for a comparison, we have simply the experience of the past 15 years.

During the past 15 years, it is easy enough to make a striking comparison. The Gibson Index Number which I planned in 1910, in order to continue in a way the Dun Index Number of Commodity Prices which was discontinued in 1907, shows for the period, 1897-1912, an advance of 66 per cent. The advance during the past year has been very rapid. Thus, the index has moved up from 106 to 120 from June, 1911, to June, 1912. My new international index number for the United States, England, and France, has advanced from 90 in 1896 to 135 in May, 1912, or 50 per cent.

Commodity and Stock Prices Since 1897

Let us compare this showing with the advance in the *Wall Street Journal's* average of 20 railway common stocks. In 1897 the average of high and low for the year was 58 and in June, 1912, 120, which is an advance of 107 per cent. We may reason if we choose to, I suppose, that stocks have advanced 107 per cent. when commodities

have advanced 66 per cent., but from such a comparison as this he would be a foolish investor who undertook to buy stocks now on account of the effects of gold depreciation as evidenced by such a showing. There are several fallacies in such a comparison which we must overcome, or, at least, acknowledge.

As Professor William G. Sumner used to say, "Given the major premise, the savage mind reasons very logically. You will generally find the fallacy packed away in the major premise." In other words, our mental digestions may be sound, but the facts with which we feed our judgments may not prove nourishing. Again, our reasoning in a complicated financial problem may be accurate, but in the application lurk subtle dangers and very often the facts before us may be unconsciously selected by ourselves in such a way as seriously to mislead us in the application.

My thought is that such a comparison as above between the advances in the prices of commodities and of leading stocks is in reality quite misleading, and yet this is exactly the comparison which underlies much of the discussion which is going on in regard to the effects of gold depreciation. Undoubtedly, many investors are being led to

sell stable securities and to invest in unstable stocks. It is almost as heinous an act to cause investors to lose money by unfair, insincere, incautious or ill-considered advice as to destroy lightly a woman's religious faith. The two are acts from the same motive of irresponsibility and lead generally to great disappointment in the end.

Twenty Railroad Common Stocks

There are two fallacies in making a comparison of the advances in the respective prices of commodities and of stocks. First, the stocks upon which the averages are based are selected. By this we mean among other things that the average investor would not have selected these 20 stocks in 1897. The 20 stocks in the list of the *Wall Street Journal* follow: Atchison; Baltimore & Ohio; Canadian Pacific; Chicago & North Western; Chicago, Milwaukee & St. Paul; Delaware & Hudson; Erie; Illinois Central; Lehigh Valley; Louisville & Nashville; Missouri Pacific; New York Central; Rock Island; Southern Pacific; Southern Railway; Norfolk & Western; Northern Pacific; Pennsylvania; Reading; and Union Pacific.

A cursory glance at this list shows that by the

test of time most of these corporations have achieved unusual success. Then why should we not attribute the 107 per cent. advance in these 20 stocks to the fact that the higher prices have followed upon the heels of financial success? Why bring in gold depreciation at all? Or, if we decide to do so, as I think we should, how shall we differentiate how much of the advance to attribute to successful management, how much to growth of country and of special sections of the country, and, third, how much to gold depreciation? These are questions worthy of careful study.

Undoubtedly in this list of successful corporations, the *Wall Street Journal* has made a happy selection. All that investors need to do, after all, is to purchase stocks of corporations which turn out successfully in the future. Following this line of reasoning, why would it not prove to be a good policy to purchase the stocks in the *Wall Street Journal's* list? In commending the happy selection of that excellent financial journal, this caution should be left with the investor. This is fallacy, number two. It is true, I think, that some of the stocks have been dropped which were used in the averages of earlier years and new stocks have been substituted. Hence we are in danger

of basing our conclusions upon averages of different things at different times.

Just to illustrate the above points in contrast, I have picked out a few stocks, selected from the list of the *Financial Review* for 1897 which was published in 1898, and I have in the following table entered the quotations of June, 1897, to compare with June, 1912.

Seven Investment Stocks in Good Standing in 1897

	Price June, 1897	Price June, 1912
Chicago, Milwaukee & St. Paul.........	80	104
New York Central & Hudson River.....	102	119
Pennsylvania.........................	105	124
New York, New Haven & Hartford.....	170	135
Illinois Central.......................	98	128
Chicago & North Western..............	113	137
American Sugar.......................	123	130
Average............................	113	125

In the above list which I have selected, representing investment properties in 1897, and not speculative possibilities as were many of those quoted by the *Wall Street Journal* list, the gain in this period of excessive gold depreciation is only 12 points, or say 11 per cent. To my mind the chances seem good that the average investor would have selected from my list rather than from the present list of the *Wall Street Journal* at that time. The singular rise in the *Wall Street Jour-*

nal list comes from the inclusion of Canadian Pacific and the coal roads. Reasoning from averages is often fallacious and the application of the gold depreciation theory is not so simple as it appears to be on first consideration.

To carry these comparisons one step farther, let us select another list to show the vicissitudes which overtake great corporations. In 1897 the chances of an investor buying the following list is good in comparison with many of the stocks on the present *Wall Street Journal's* list at that time. Some of the roads which have made great advances in the *Wall Street Journal* list were just emerging from failure and reorganization in 1897.

SEVEN ACTIVE LOW-PRICED STOCKS IN 1897

	1897	1912
Chicago Great Western.........	4	Reorganized since
Lake Erie & Western...........	15	16
Long Island....................	42	51
Minneapolis & St. Louis........	20	19
Missouri, Kansas & Texas.......	12	27
Missouri Pacific................	17	38
Wabash.......................	5	Receivership
Average....................	16	22

Here is a gain of 6 points in 15 years, or 0.4 per cent. per annum which reduces to $2\frac{1}{2}$ per cent. per annum on the purchase price. Few dividends were paid on the stocks in this list. I have assumed that the average investor accepted his loss

in Great Western and Wabash philosophically without permitting more good money in assessments to follow the bad original investments. Moreover, we have ignored the carrying charges of 6 per cent. per annum, which if allowed for after deducting dividends of the earlier years, would have resulted in a net loss per annum.

In a book such as this, which aims to present financial truth for the purpose of assisting investors, such questions as the effects of gold depreciation on the prices of securities cannot be too carefully investigated.

Varying Effect of Gold Depreciation

The two examples given above show that the supposed theoretical effects of gold depreciation upon different selections of stocks are quite different. In the case of the *Wall Street Journal* list, the effect, if we attribute the rise largely to the gold influence, seems large. But this list represents extremely successful corporations. The western and southern groups have enjoyed phenomenal prosperity and the eastern coal roads have succeeded notably from the standpoint of profits.

When we apply the theory to the eastern divi-

dend-paying roads, little effect is noticed. When applied to a selection of low-priced stocks, no effect is to be seen. The three selections represent the successful, the average, and the poorly blessed among the corporations. It is plain that the application of the gold depreciation theory is not easy. For the investor looking ahead, the practical application is extremely difficult. It seems wise, therefore, to consider the theory rather carefully. What are the economic sequences of an increasing supply of gold?

In an era of inflation with the prices of commodities steadily rising after an era of falling or stagnant prices, things look too easy to the producer of commodities. Like the horse with short-sighted glasses, the earth looks nearer to him and the steed steps high. The recent tremendous output of securities on the part of the producing interests is a passing token of this fool's paradise in which business men are and have been living. Writing in August, 1907, for *Moody s Magazine,* the writer endeavored to emphasize an element which is fundamental to the situation to-day.

"Readjustment of prices forces readjustment of wages; and what is even more disturbing, readjustments of all calculations of probable profits in the

various lines of business, a veritable setting at naught of business judgment which is gained by business men, not by a superior knowledge which foresees the future, but by that slow selection by trial and failure personally among men, some of whom succeed notably because of a combination of conditions and qualities the very nature of which they themselves are often totally in ignorance. Working by a skill acquired through the use of averages, taught by an experience covering several years, business men, in some lines, have awakened to find losses where they supposed profits were assured. Unable to calculate nicely, whole industries have become over-extended. Over-production has resulted because sufficient allowance has not been made for the reduced purchasing power of the population on account of the increase in the cost of living. In addition to this, costs have been under-calculated through the wage element which has advanced although probably not to an extent commensurate with the increased cost of living. If the country to-day is standing on the verge of one of the greatest crises in its history, only by appreciating the extreme gravity of the situation can we hope to escape the most disastrous effects."

The Pendulum of Price Movements

It is as true to-day as yesterday that miscalculation is the mistress of uncertainty. Uncertainty when widely prevalent destroys confidence. Lack of confidence undermines business. This is the psychological train of consequences arising from gold depreciation. Tremendous losses occur in one quarter and excessive profits in another. The pendulum of price movements tends to swing through wider and wider arcs. The causes of individual movements are hard to analyze. Everything depends upon the future, and who knows when the movement may be reversed?

Let us consider the simple theory of the relation of rising commodity prices to the supposed changes in the prices of stocks. The chain of economic sequences is supposed to be this: Increasing gold results in rising prices. Increasing prices of commodities result in an increasing rate of net profits on the present capital. The more heavily bonded at a low interest a corporation is at the commencement of the era of the "gold influence," the greater will be the advance in the common stock. All this seems plausible and is doubtless true, provided that the corporation is successful in holding the increasing net profits as a result of

the higher prices which can be exacted and does not lose much or all of the advantage (1) to labor by higher wages, (2) to the consumer by price regulation as in the railroads or by charter rates of fare as in the street railways, and (3) to the money lenders in higher interest on new bonds issued to pay for an extended system of expansion.

Danger in Expansion

Either *proviso* one or *proviso* two may counterbalance a large fraction of the advantage, and very important is *proviso* three that the corporation shall not expand with newly borrowed money, shall not venture too far into the fool's paradise of alluring profits, shall not borrow too much new capital at the new high interest to be spent in improvements at the new high prices for materials and at the new high wages for labor. Expansion of a corporation soon destroys the heritage of the gold influence.

The dividend payers mentioned in my first list, Chicago, Milwaukee & St. Paul; New York Central; Pennsylvania; New York, New Haven & Hartford; Illinois Central; and Chicago & Northwestern, have expanded greatly, and, consequently, have lost the advantage which they might have had,

if the three *provisos* already mentioned had remained favorable.

How the Roads Owning Coal Lands Have Profited

Now, let me present a list of corporations which did not expand greatly because the coal lands on which their prosperity depends were purchased in a period of lower prices.

	June, 1897	June, 1912
Central of New Jersey	79	375
Chesapeake & Ohio	17	78
Erie	14	35
Delaware & Hudson	108	164
Delaware, Lackawanna & Western	153	542
Norfolk & Western	11	114
Reading	21	168
Average	58	211

The roads above show an advance of more than 250 per cent. The causes are gold depreciation producing a great increase in property values, a stable price policy and a lack of necessity to buy coal lands and improvements on a scale of rising prices and of higher interest rates in order to provide for more than normal growth.

Why Pennsylvania; New York, New Haven & Hartford; New York Central, etc., my first list, failed to compare with the coal roads in point of advance is probably due to the tremendous expan-

sion of the former, in vast new terminals, electrification and the purchase of other properties. Should these roads enter a state of equilibrium in regard to expansion and should gold depreciation continue for 10 years more and should public service commissions permit increases in the rates, these roads, too, might benefit.

In the above comparisons no account has been taken of dividends and rights. My next comparison will throw light upon the following question which should be interesting to an investor. Assuming a property capitalized with half bonds and half stocks and earning 6 per cent. on stocks and 5 per cent. on bonds, what should be the effects upon the yields of the stocks and bonds by a "gold influence" depreciating at the rate of $2\frac{1}{4}$ per cent. per annum? We should expect that the stocks would yield during the period of the depreciation of gold 6 per cent. plus twice $2\frac{1}{4}$ per cent., and the bonds 5 per cent. less $2\frac{1}{4}$ per cent.; in other words, $10\frac{1}{2}$ and $2\frac{3}{4}$ per cent., respectively, after allowing for losses and gains in principal and increments.

To illustrate the theory by statistics, I have selected 10 great railroads and figured out the total increments of this period, dividends, rights and appreciation or loss in market value. The rail-

roads selected were Atchison; Baltimore & Ohio; St. Paul; Great Northern; Illinois Central; New York Central; Northern Pacific; Pennsylvania; Southern Pacific; and Union Pacific. These are all successful corporations.

Experience of two investments of $100—one in the common stocks and the other in selected bonds of the same railroads:

	In stocks	In bonds
Original investment on Jan. 2, 1901..	$100.00	$100.00
Value on Jan. 2, 1910................	126.10	91.30
Gain from appreciation of price......	26.10	Loss 8.70
Dividends or interest paid during 9 years..........................	43.30	32.80
Value of the rights of 9 years........	30.20	
Total increments as above...........	99.70	24.10
Average per cent per annum..........	11.1%	2.7%

We find that our reasoning is borne out rather closely by the actual results of the calculation. Stocks have yielded 11.1 per cent. against 10.5 per cent. estimated and the bonds 2.7 per cent. against 2.75 per cent. estimated. In other words, the net result is that stocks have yielded four times as much as bonds in the same railroads and from the same investment over the same period.

How Industrial Stocks Have Appreciated

It is probable that the railroads as a class have not secured a proportionate share in the appreci-

ation of stock values which should have followed prolonged depreciation of gold. Government regulation of rates is an important cause. The industrials are free from rate regulation. Let us turn to a list of 19 industrials which I have selected from the records of the *Financial Review* of 1901.

These industrials are obviously a selected class, since the *Financial Review* groups them under the head of "leading industrials." Nor has an attempt been made to determine the value of the rights which have been distributed. The following table simply shows the experience of an investor who placed $100 in the average of the 19 issues in 1900 (or in 1901 in the case of Steel Common), and held these securities until June, 1912. The dividends and appreciation in value of the stocks have been calculated.

Original investment, June, 1900		$100
Present value, June, 1912		136
Appreciation in stock value	$36	
Dividends received approximately	68	
Total additions from dividends and appreciation	104	

Average annual rate of increment, 8.7 *per cent.*

The industrial stocks selected are the following: American Car & Foundry; American Cotton Oil; American Sugar Refining; American Telephone

& Telegraph Co.; Brooklyn Union Gas; Colorado Fuel & Iron; Consolidated Gas; Diamond Match; General Electric; National Biscuit; National Lead; New England Telephone & Telegraph Co.; Pressed Steel Car; Pullman Co.; Standard Oil; Swift & Co.; United Fruit; United States Steel; and Westinghouse.

Some of these industrials have distributed valuable rights. It is probable that the value of the rights would bring up the 8.7 per cent. average return to 11 per cent., which was the figure for the prosperous railroads, when all three factors were included.

Stock and Bond Profits Compared

It seems fair to assume that successful industrial corporations have been able to average 11 per cent. during this period of gold depreciation. The following calculation shows the relative advantage of investing in the stocks of industrial corporations as contrasted with investments in railroad bonds. Let us assume that commodity prices have advanced 40 per cent. during the interval; also, that a proper selection of industrials would yield 11 per cent. annually. Fifteen years at 11 per cent. gives 165 per cent. for the increments and, con-

sequently, the total investment would have amounted to $265.

The bond investment already referred to yielded 2.7 per cent. and maintained the original investment unimpaired in the gold standard. The amount is $141 in comparison with $265 for stocks.

Now what may be said to be the relative advantage measured in *purchasing power* rather than in the gold standard? We may divide $265 and $141 by 140 to reduce the figures to ratios of purchasing power which compare with conditions prevailing when the investments were made. Obviously, it is not fair to take 66 per cent., the total advance to date. I have taken 40 per cent. in order to asume a figure which corresponds to the advance which has occurred when we compare the averages of commodity prices over several years around the years 1897 and 1912. The ratio for stocks is 189 and for bonds 100, showing the purchasing power comparisons of the total amount of the investments, including appreciation, dividends, and rights. If now we deduct 100 to represent the purchasing power of the original investment, the balance leaves the total increments in purchasing power, namely, 89 per cent. increase for the

stocks and 0 per cent. increase for the bonds. This reduces to 6 per cent. per annum for stocks and 0 per cent. per annum for the bonds.

The Purchasing Power of Stock and Bond Earnings

Thus, we see that the investor in stocks has preserved his original investment unimpaired measured in purchasing power (and not in the deceptive gold standard) and has received *in addition* increments equivalent to 6 per cent. per annum in purchasing power. The investor in bonds by saving all his interest payments and reinvesting would have been able to maintain his principal in purchasing power, but had he done this, he would have had no income. *Measured in purchasing power, the investment in stocks shows 6 per cent. per annum better than the investment in bonds.*

This means that millions of dollars of property value have been transferred silently from bondholders to stockholders during the past 15 years by this automatic, unconscious action on the part of the legal definition of a stock as distinguished from a bond through the hazard which exists in a standard of value resting upon one metal and not upon a plurality of the necessities of life.

The judgments of great financiers have been set at naught. Trust funds have been cut in two measured in purchasing power by the strict limitations requiring investments in bonds. One of the greatest financial problems of our day is uncovered in the above comparisons.

Savings banks and trust funds are required by law to invest largely in bonds. Sooner or later, savings bank depositors are bound to become aware of the facts, and then they will continue to increase their withdrawals at an increasing rate for more remunerative investments elsewhere. The Postal Savings Bank will help to increase the rate of withdrawal, because the U. S. Government guarantees the original principal in the gold standard. When withdrawals reach a point where savings banks are obliged to sell bonds in large volume, the price of bonds is likely to melt away as British Consols have been doing, and many savings banks will reach a state of insolvency requiring dissolution. Something should be done to permit savings banks to invest in seasoned dividend paying stocks of roads in which they make bond investments in some proportion to permit hedging.

Four Questions to Consider

It is the duty of the writer to suggest possibilities which he cannot solve. By contemplating the possibilities, investors may avoid some of the pitfalls. Looking ahead, four points to keep in mind are the following: (1) Have the past effects of gold depreciation been wholly discounted? (2) If not, how much has been discounted? (3) Will gold depreciation continue and at what rate? (4) How shall an investor select the corporations which will benefit, or how may he hedge the issue?

To my mind the past is history. The future is a problem of unexpected news. We shall know these points as they are only when they occur. They are like the weather and the "acts of God." They occur and we know not when or where. Hence, like La Place, we must reason by contemplating the possibilities. Expanding the reasoning, we have before us three principal possibilities: (1) a moderate increase in gold production; (2) a large increase; and (3) an excessive increase. Under (1) a moderate increase in gold production, the growth of the world's commerce and a further increase in prices would probably produce a satisfactory adjustment. With the second condition, a large increase of gold for the next 10

years, stocks would be a purchase and bonds would be a poor investment. Under the third hypothesis, an excessive increase, neither stocks nor bonds would be good investments, because the political element would enter.

An International Gold Commission, which the writer proposed in 1907 and President Taft recommended to Congress in 1912, would become a necessity in order to seek out the proper remedies. This would be forced upon legislating bodies throughout the world by the widespread insolvency which would occur among investment institutions of all classes holding bonds largely as investments, simply because falling bond quotations would make their assets less than their liabilities. During the past 10 years a considerable weakening has occurred in the surplus reserves of savings institutions all over the world owing to the considerable fall which has taken place in the quotations of bonds.

Suggested Remedies for Excessive Gold Production

Many legal remedies for the situation would be suggested, if the second or third condition develops. The simplest remedies follow;

Allow savings banks to value all their bonds at par rather than at market price, to prevent insolvency.

Require all banks to keep a minimum reserve of 35 per cent. instead of 25 per cent. as now at central points and 20 per cent. everywhere else, with 75 per cent. of the reserve in gold. This would use up much gold and strengthen credit.

Place a tax on the production of gold sufficient to retard production. This would require international agreement.

Adopt an optional multiple standard for new contracts, and quote gold in the multiple standard. Writing in *The Independent* in 1910 on the Remedy for the High Prices, I suggested the adoption of an optional multiple standard for wage contracts. This would tend to do away largely with strikes, because wages would fluctuate with the cost of living as declared daily by the United States Bureau of Standards. This proposal met with the approval of the Massachusetts Commission on the Cost of Living, which says: "No specific remedy for the situation exists, unless it be sought in the direction of a new standard of value. For many years the economists have been discussing the possibility of that. Many of them urge

its creation by the framing of what they describe as a 'multiple standard.' It is hard to see how harm could come from giving official aid to such a standard for the use of borrowers and lenders who chose to adopt it."

Finally, since the advance in prices is greatest in farm products, any revision of our banking laws which cheapens agricultural credit will tend to increase production and reduce prices. Such an attempt has been made in France.

All these things are within the realm of possibility. What now seems probable is a moderate increase in gold production, checked sooner or later by increased use in the arts, increased utilization by the eastern nations as they develop under modern inventions, growth of commerce, legal regulations increasing the ratio of gold reserve to deposits in all banks and by an increasing cost of production for gold which will be caused by higher prices and wages.

The Investor's Safest Course

For the investor the safe course lies in ascertaining the real property value at present prices behind his investment. Where both stock and bonds represent real property value, a division of

one-half in bonds and one-half in stocks of the same corporations enables the investor to protect the safety of his funds. If the corporation benefits by gold depreciation his stocks will reap the benefit. If a crisis occurs with the ensuing widespread industrial liquidation from overproduction such as the world has seen with some regularity every 20 years, in 1873 and again in 1893, as a bondholder the income from his bonds will probably continue, even if his stocks go down somewhat in the general liquidation which occurs in advance of a great crisis.

The central point is whether the near future will see such a world crisis or whether the flood of gold will prove sufficient to hold prices of commodities and securities on a level without the old-time violent readjustments. What the situation will be it is impossible to predict. The investor must watch tendencies and developments in gold production and attempt to judge for himself what the extent of its influence will be.

CHAPTER VI

BONDS WITH A STOCK BONUS

BY MONTGOMERY ROLLINS

Author of
"Municipal and Corporation Bonds," "Money and Investments," etc.

CHAPTER VI

Bonds with a Stock Bonus

IT was in 1843 that Edward Kellogg hit upon the idea that "Anything that exists in perpetuity is valuable in exact proportion to the income it will yearly bring to its owners."

Now, income is money or its equivalent. Money —because, in all enlightened countries, it is founded upon gold, in the final analysis—is a commodity just as much as coal or pig iron and, consequently, its exchangeable value as a commodity determines its value to the owner. Thus admitting that increased production of gold is one of the logical causes of the rise in living cost, it is not a far cry to see that the income to which Mr. Kellogg refers has a changeable value to the possessor in accordance with the abundance or scarcity of gold, the commodity upon which it is based. We will not attempt to argue, pro or con, as to the merits of the over-production of gold theory, but, as the consensus of opinion is largely in its favor, we will base our conclusions thereon.

The ordinary "shares of stock"—as Americans

term them—and the English bond issue known as a debenture, which is, usually, an irredeemable affair, differ materially, in the form in which Kellogg's theory may be applied to them, because, in the first instance, the rate of income, i. e., the dividend, is not necessarily fixed, and may, very likely, if the corporation is a successful one, increase with the demands brought about by rising prices. For is it not a fact that earnings have generally increased proportionally with the cost of living? It is believable, therefore, that the shareholder may obtain, in one form or another, the equivalent of his needs.

Redeemable and Irredeemable Bonds

But, in the second instance—that of the irredeemable bond with a non-changeable rate of interest—the matter must be approached from an entirely different standpoint; the argument, likewise, applies to a redeemable bond with a fixed interest rate. There is no method by which income upon such bonds can be increased except by a reduction in the price of the principal. This, however, does not benefit the holder who has already invested his money therein. The income upon an irredeemable bond or a share of stock is

immediately determined by dividing the yearly income rate by the purchase price, less the amount of interest or dividend accrued. A security, of this class, paying 6 per cent. yearly, and selling at 150, yields an income of 4 per cent. At 120, it yields 5 per cent.

But the price of a redeemable bond is computed in another way, for the reason that, whatever the cost of such a security, allowance must usually be made for its ultimate repayment at par. To illustrate, a bond falling due in 20 years, selling at par, and bearing 4 per cent. interest, returns that rate of income, as anyone will readily understand, but if it is desirable to increase the rate of income to 5 per cent., the price must drop nearly 13 per cent. The longer the bond has to run the greater the shrinkage in price for the equivalent increased return in income. Time is a factor, here, but not in the case of issues that run in perpetuity.

It is not a difficult proposition to understand, therefore, that any security with a fixed income will change in price in accordance with the purchasing value of that income, and that bonds will be affected in price, more or less, according to the length of time which they have to run in obedi-

ence to this perfectly obvious rule of reasoning, and that stocks will do likewise unless their dividend rates advance in sympathy with the advance in prices.

Other extraneous conditions are not taken into consideration in this argument, prices of securities being treated from the standpoint of cost of living only.

The Advantage of Short-Term Bonds

If the argument is clear and accepted, then it behooves one, in the time of rising prices, to own short-time bonds, if he have any at all—either that he may hold the same until maturity, and thus reinvest at a better rate of income, or that he may sell them at prevailing prices while yet the pinnacle of rising living prices has not been reached. It would benefit him but little to sell, at a pinnacle of high prices, because, whenever he sells, he must always expect to accept, everything else being equal, prices dependent upon the income value.

During the past few years, and particularly just previous to our 1907-8 panic—which the writer believes to have been nothing more than a banking flurry—much difficulty was experienced in the placing of long-time low-rate bonds, and

our corporations were hard put to it to finance their immediate needs, except by the hand-to-mouth expedient of short-time notes with interest returns commensurate with reigning prices. Purchasers were easily found, by this method, and hundreds of millions of dollars worth were sold.

Presumably this buying of short-time notes was made possible by the crying need of a better rate of interest than obtainable from new issues of longer time bonds. The low figures at which the same grade of bonds then outstanding were quoted in the market, formed too great a contrast to the higher prices at which the corporations were trying to sell new issues to permit of the latter being salable.

The writer thinks that, unconsciously, the investor, in selecting this temporary form of security, builded better than he knew, providing it was during a period of rising prices. It proved to be the case, for it enabled him, in a short time—1 to 3 years—to get possession of his principal again, and to reinvest it at an increased rate stimulated by increased commodity prices.

This argument may be continued with good reasoning and benefit so long as the cost of living continues to advance; but if, upon the other hand,

we should, as they say in electrical plants, reach our "peak load" and then pass through a long period of declining prices in the world's markets of commodities, the investor would be equally benefited to have purchased very long time fixed interest-bearing securities at the low prevailing quotations contemporary with the "peak load" time of commodity prices.

This argument, then, if a logical one, which the writer believes it to be, seems to offer to the man, with cash in hand, two forms of investment: the one, short-time issues, that the principal may be periodically returned at certain intervals; the other, equities rather than mortgages, meaning, thereby, shares of stocks rather than bonds—upon the principle that the dividend rate is not necessarily a fixed one, and that it may advance in accordance with his needs.

Stocks as an Investment

But against this last must be entered a few possible dangers. It may be, for instance, that labor troubles or too pernicious legislation and government activity may so curtail the energies of our corporations as to make it either impossible or dangerous to raise dividends.

An investor of much experience, in touch with the great business highways of life, has recently declared, having particular reference to the dynamic conditions displayed in the Lawrence strike, that he purposes, from now on, to place his money, if in industrials at all, in such that employ the minimum of labor and the class of labor as far removed as possible from the turbulent kind that hails from southern Europe and more distant Asia. This might mean, for example, hydro-electric propositions, which employ a very high class of labor, particularly the educated kind, in many departments, and, certainly, minimum of labor in proportion to the money value of its output.

The writer is rather inclined to believe that so long as we continue upon our headlong career of advancing the cost of living, and then the price of labor, in endless repetition, the short-time note plan of investment has the better of the argument. At least, if the investment has been wisely selected, the owner can have his money again in hand, every now and then, and can take a breathing spell, scan the horizon, and size up the situation, as it were, before reinvesting. But, if he has purchased a long-time investment, either in the form of bonds or stocks, he must wait, in the first instance, many

years before the return of his principal, and, in the other case, obtain it only by a sale of the security at a probable shrinkage from its original cost, which would apply, with equal force, to a redeemable long-time investment, if he desired to realize upon it before maturity.

The investment, which is of short maturity, may be held until paid, or, if sold, the shrinkage is but a fraction of a per cent., because, the converse of the long-time bond, as explained further back, the shorter the investment the less the shrinkage in price to increase the yield from its normal yield at par. An illustration is that of a six months' note paying 4 per cent. at par; at 99½ the income rate will be raised to 5 per cent.—a loss of only ½ per cent.

An Income to Meet Your Needs

The reader must accept one fixed immutable law, which is this: that a man's income must fit his needs. If he has been accustomed to living, with all due regard for economy, upon a 4 per cent. return upon his principal, and the cost of living advances 25 per cent., he must have a 25 per cent. increase in his income, or a 5 per cent. return in place of 4 per cent. And he will get

it—"he" being used in the broad sense of the investing public. He must have the necessities of life, and will, consequently, refuse securities paying him but 4 per cent., and will insist upon, and certainly obtain, the better 5 per cent. rate.

The keynote of the whole situation is in the thought that countless thousands of small investors demanding, say, a 5 per cent. income in place of 4, will be likely to see their wishes fulfilled, and their demands, like the advance of a horde of locusts, may not be stayed. It is this multitude of small investors, acting in unconscious unison, which is the deciding factor in the price of securities.

One has but to observe the market prices of our standard investment stocks, such as that of the Pennsylvania Railroad—stocks to which no immediate speculative value is attached—to see what a firm grasp upon the situation the public has had, and still has. Perhaps, as never before, in the last decade, the small investor has realized the meaning of "net return," and its meaning has been emblazoned upon his mind with great distinctness, because of the pinch of necessity besetting him upon all sides, attributable to the rise in living expenses.

However stock market manipulation—that power which is credited with ability to advance or lower stock exchange prices at will—may have been resorted to in order to lift prices of stocks of the "Simon pure" investment class, they have, each time, reached a fixed level which it seems impossible for them to have crossed. And that fixed level is the base line determined by income necessity and income value, all so clearly laid down by one Kellogg nearly three-quarters of a century ago.

The Investor Who Favors First Mortgage Bonds

But let us imagine the investor of a somewhat stubborn disposition and not inclined to forsake his traditional and laudable habit of preferring the mortgage—particularly the first mortgage—to the equity, or even the unsecured note—in other words, genuine prior lien bonds to floating debts and shares of stock. Suppose him to meet our theories with the praiseworthy argument that the first-mortgage bond is the safest form of investment in any given property, and that, in case of disaster, and the property sold under foreclosure, there might be nothing left for the investor in its

notes or shares after satisfying the claims of the bondholders.

There is no contrary answer to make him, and he will smile complacently and dash our theories, because he will read in our faces a reflection of his own deep-rooted principles that no increase of income to meet the cost of living is economically sound if obtained at the cost of a like risk to the capital.

Bonds With a Stock Bonus

Just at this juncture, however, we advance another thought which runs this wise:

He might buy bonds which carry with them a "bonus" of stock. Thus he could still have his first charge against the property in the form of a fixed rate of interest with which he would have to put up, during sunshine or storm of living expenses, but, on the other hand, he would have a partnership interest in the company, costing him nothing, which would help out his living, if the enterprise prospered to a dividend-paying degree.

And we are not at all embarrassed or confused when he desires to know how and where such combinations are to be had. We will explain:

"Going" propositions with established earnings

enjoy a credit and reputation by which they can usually obtain necessary funds for extensions, etc., without offering any extra inducements such as the stock bonus, although, during the last decade, a considerable inducement in this line has been given by some of our best and thriftiest corporations in the form of "convertible" issues. But that is another subject, and aside from the point here.

Financing New Enterprises

When a new enterprise is to be launched, and capital invited to develop a property, for the success of which prospective investors are dependent upon correct estimates of costs and earnings by expert engineers and bankers, the matter looks different.

It is becoming more and more the custom of the day to make bond issues, upon such as the last—construction propositions, they are called—equal, or nearly equal, in face value, to the money expended on the property.

Our keen-minded investor sees his opportunity here, and suggests that if he buy such a bond he would be taking all the risk and the other fellows all the profit.

Not quite that, although we must admit that it appears so at first glance. But we will see:

Let us create an imaginary company—it may be a hydro-electric, a coal mining, or a manufacturing enterprise—with $5,000,000 in first mortgage bonds, and an equal par value of stock; plant and all complete to cost $4,500,000. The bonds are all sold to bankers at 92, or $4,600,000, leaving $100,000 cash in the treasury of the company. Later, they are sold to the public at 95, giving 3 per cent. cash profit to the bankers, which is deemed a fair charge for the years they may have put into discovering the possibilities, and bringing to fruition all the countless details of the proposition. Besides which the machinery of their house, the good-will of its clientele, and so on must be paid for.

So we may be said to start even, at this point.

What the Banker Gets for His Work

The investors have provided the funds to set our plant in motion, and for a small balance for its treasury. The bankers have been paid for their valuable services, so we may now consider who is to get that $5,000,000 in stock. The investors

want the continued and indefinite interest of the bankers, who are experienced in such things, to look after the management of the plant, and to do further financing, if needed. But they must be paid for this work; it will take skill, patience, and energy, and the laborer is probably worthy of his hire, in this instance. So we believe him to be entitled to not less than half of this stock, which, at the moment, has no real value, because the property is not finished and thus not earning anything with which to pay dividends, and, furthermore, the stock represents no cash investment.

The Investor's Rightful Share

But the other half? To the bondholders to be sure! A "stock bonus" of 50 per cent.—5 shares of stock with each $1,000 bond. And why not? Is it not a fair division of the spoils, one-half to those who give the money and take all the risk, and a like portion to those who give their time and look after the management? The bankers, with a half interest, will have an incentive to make the company prosper. But some of their holdings may have to go to men of influence who are wanted as directors, or in other ways, too many to mention here—perhaps to some promoter who may have

first brought the plan to the attention of the banking house, or helped in securing the water rights, and what not.

Our investor looks incredulous. We surmise that he can recall issues of a similar nature where no bonus was offered, where the bonds were sold on the reputation of the banking house, one of those whose name alone will sell almost anything without any such inducement as we have outlined. But his smile gives way to a set expression, as he questions, for the first time, its right to take all the stock—all the profit—and leave its customers with all the risk. We watch him as he grows to realize the ethics of the situation, and are somewhat shocked at his language, as he finally exclaims:

"They have hogged it all."

He does not need to explain to us that he owns some bonds which he now believes should have been accompanied by some stock. His few forcible words tell all that. But we hasten to explain that if any of his bonds are on properties that were completed, and showing earnings or closed contracts for profitable business, when he bought them, they had passed through the incubator period of construction, and the other fellow, who had car-

ried them during that time—and not he—was entitled to the bonus.

Preferred and Common Stock

We further explain that the form of capitalization of our imaginary company is but suggestive; that preferred stock might be used in place of bonds, or the stock divided into common and preferred; that the latter might be much smaller in amount than the common, and might be used to pay certain promoters who had discovered the opportunity for the enterprise, and who had first secured control of the necessary lands.

He sees that the capital arrangement is a movable one, and also grasps our idea that this very feature may make for such a division of the stock, that a lesser proportion than 50 per cent. with the bonds might be fair and just—40, 30, or even 20, in some instances.

But however much of our argument may have been hazy to him, there is now one point that stands out as clear as a burning desert sun, that on a "construction proposition," there must always be such a division of the securities that they will represent a proper balance between investment on

the one part, and promotion, responsibility, and management upon the other.

Our cautious investor is not, however, to succumb without a parting shot, which we have known well that we could not escape—the propriety of stock issues, except against values.

Legitimate Chances for Large Returns

A big question. One upon which pages might be written, for or against. We can only take refuge beneath the sweeping claim that if such a principle as limiting one's profits to a savings bank rate—the elimination of all speculation from enterprises—had been rigidly enforced in America the past hundred years, but little development would have resulted. We even now might not be connected by rail with the Pacific Coast. Pioneering in the field of finance, with its attendant risks, must offer large prospective profits, or why should one chance them? Would mining for the precious metals—in which probably more money has been lost than made—attract capital if one's profits were to be limited to 4 per cent.?

No! there are enterprises and enterprises; some which are assured successes from their inception, but many others to which promoters and capital

would never turn if not allowed the speculative inducement of stock without initial value and cost. But, on the whole, we imagine that the world is the better for it, because of the many conveniences of life and the remarkable progress of civilization which may not be fully accounted for in any other way.

Three Methods of Increasing Your Investment Income

Finally, then, there appear to be three methods by which the distracted investor may obtain some relief:

First: The short-term security, paying more than long-time bonds; rates compatible with the exigencies of the moment.

Second: The business or partnership end, in the form of stock, which, if of the investment class, should also be upon an income basis commensurate with the times.

And, third: The combination bond and stock bonus plan, which, if wisely selected, should offer reasonable security, and give one the first-mortgage claim upon the property, while permitting of a participation in the business profits expected to accrue through the shareholdings, and which would go to pay the bond interest.

CHAPTER VII

CONCLUSION

BY G. LYNN SUMNER

Editor "Securities Review"

CHAPTER VII

Conclusion

In gathering information as a basis for the choosing of investments it is essential above all else that the material be drawn from impartial and unprejudiced sources. This fact was kept foremost in mind in gathering the material for this book. Those who prepared the preceding chapters are universally recognized as profound students of economic and financial conditions, men whose conclusions are invariably drawn from a careful analysis of conditions as they exist.

The basic facts upon which all the authorities represented in this book agree may be briefly summarized as follows:

1. Commodity prices in general have advanced approximately 50 per cent. since 1896. In other words, the gold dollar has depreciated in buying power 33 per cent. in 16 years.

2. The chief cause of this depreciation has been the steadily increasing production of gold and the resultant increased amount of gold in circulation.

3. With improved mining and milling methods

and the probability of the discovery of new fields, it seems certain that the production of gold will continue to increase in the future, with a corresponding depreciation in its purchasing power.

If these conclusions be true, the situation is one of tremendous importance to investors, for with the value of capital depreciating it must naturally follow that those forms of investment which yield fixed rates of income and at maturity return merely the par value of the principal must also shrink in value.

Therefore, when the *Securities Review* was arranging to give to the public the information which this book contains, we decided that, authoritative as these articles are, standing by themselves, we should endeavor to give them, if possible, an even broader substantiation by submitting the conclusions they contain to a referendum of those best in position to verify the facts.

No body of men in this country has made a more thorough study of prevailing economic and financial conditions than those who head or are connected with the Departments of Economics in our colleges and universities. In their collegiate work, and as members of the American Economic Association, they have been leaders in the devel-

opment and advancement of our great business and financial policies. This is best evidenced, perhaps, by the fact that nearly every important investigating commission appointed by the federal government to study commercial and financial problems has been drawn in part from the ranks of our political economists.

The *Securities Review,* therefore, turned to this same body of men because it believes that they have invariably drawn their conclusions after careful intimate study and from an impartial and unprejudiced standpoint.

With the preceding chapters of this book as a basis, we submitted the following questions to fifty economists, taking their names at random from the membership of the American Economic Association:

The Three Questions Asked

1. Do you believe the increased gold supply is the basic cause of the present high cost of living?

2. Do you believe the general price level will continue to advance in the future?

3. What form of investment do you consider most desirable in a period of rising prices?

A few of those replying requested that their

names be not used, but we present here the replies of 32 economists, including many who are universally recognized as authorities upon the subject. That the verdict may be absolutely fair we present, of course, all the views expressed, regardless of whether they agree or take issue with the principle advanced. A summary of the opinions follows the individual expressions.

Do You Believe the Increased Gold Supply is the Basic Cause of the Present High Cost of Living?

Irving Fisher, Professor of Economics, Yale University:

"Yes."

Joseph French Johnson, Dean of the School of Commerce, New York University:

"Yes."

Willard C. Fisher, Professor of Economics, Wesleyan University:

"Yes."

Henry R. Seager, Professor of Economics, Columbia University:

"Yes."

E. W. Kemmerer, Professor of Economics, Princeton University:

"Yes, the chief cause."

John T. Holdsworth, Dean, School of Economics, University of Pittsburgh:

"Yes."

Lee Galloway, School of Commerce, New York University:

"I do."

Cheesman A. Herrick, Girard College:

"No. No one cause can be singled out as basic."

I. Grinfeld, Columbia University:

"If by 'high cost of living' you mean high prices, my answer is *Yes.*"

Walter E. Clark, Department of Economics, The College of the City of New York:

"Yes."

W. G. Hastings, College of Law, University of Nebraska:

"I do not."

Lewis H. Haney, School of Economics, University of Texas:

"The question suggests the danger of confusing 'cost of living' with 'prices.' 'Cost of living' may be high without 'general prices' being high, for the average man's living immediately depends on relatively few things. The application of the distinction in the present is this: There has been a

general rise in prices due to increased gold supply; and also a further rise in cost of living due to increased population and an increasing strain on natural resources. Prices of food stuffs, etc., have risen most. The present high 'cost of living' has two basic causes: (1) Tardiness of adjustment in wages and salaries to a general rise in prices caused by increased gold supply. (2) A growing realization of the limitation of our land supply finding expression in higher prices of foodstuffs, etc., and higher rents."

Geo. G. Groat, Ohio Wesleyan University:

"It is one of the chief causes."

M. T. Copeland, New York University:

"I believe that the increased gold supply is the basic cause of the present high cost of living. The growth of population has tended to enhance the price of foodstuffs and the tariff keeps the price level higher here than abroad. But the increased output of gold is, I think, the fundamental cause."

W. F. Gephart, Ohio State University:

"It is the basic cause of the present high prices, not the basic cause of the real high cost of living."

John Edwin Brindley, Professor of Economics, Iowa State College:

"It is one of the important causes. I do not believe it is strictly scientific to say that any one cause is basic when speaking of so complex a phenomenon as the high cost of living."

Francis H. Bird, University of Wisconsin:

"I believe it is one of the causes."

Augustus O. Bourn, Columbia University:

"Yes."

J. E. Hagerty, Ohio State University:

"It is one of several causes."

H. J. Davenport, University of Missouri:

"Yes."

Frank H. Hankins, Clark University:

"Yes."

Edward M. Arnos, Department of Political Economy, Olivet College:

"If you mean by 'basic,' one of the causes, evidence indicates that such is the case."

Frank T. Carlton, Professor of Economics, Albion College:

"It is one of the important causes, but not the sole cause."

Albert S. Bolles, Haverford College:

"I do not. The rise in prices can be more easily explained in other ways."

A. G. Fradenburg, Adelphi College:

"It is one of the causes. I should hardly care to call it the basic cause."

Fred R. Fairchild, Assistant Professor of Economics, Yale University:

"Yes, the most important cause, although other causes have helped to produce the result."

Everett W. Goodhue, Colgate University:

"Yes."

Royal Meeker, Department of Economics, Princeton University:

"Yes, although the higher scale of living has perhaps an equally great influence."

C. C. Huntington, Department of Economics and Sociology, Ohio State University:

"It is an important cause, but not the only one. The psychological factor may be mentioned."

J. L. Gillin, Department of Political Economy and Sociology, State University of Iowa:

"In part, yes. It is also partly due to the increasing demand for our products both at home and abroad. The gold supply has its effect, however, in that it increases the price of commodities while wages and salaries respond to this increase of money less rapidly."

Rockwell D. Hunt, Department of Economics and Sociology, University of Southern California:

"Yes, but by no means the sole cause."

H. O. Allison, University of Missouri:

"It is one of the basic causes."

Do You Believe the General Price Level Will Continue to Advance in the Future?

Irving Fisher, Professor of Economics, Yale University:

"Yes."

Joseph French Johnson, Dean of the School of Commerce, New York University:

"Probably for 10 years."

Willard C. Fisher, Professor of Economics, Wesleyan University:

"Yes."

Henry R. Seager, Professor of Economics, Columbia University:

"Not indefinitely. Higher general prices means higher costs to gold producers. This in time will check gold production and restore the equilibrium."

E. W. Kemmerer, Professor of Economics, Princeton University:

"Yes, for some time, although, as in the past,

there are liable to be frequent interruptions and temporary declines."

John T. Holdsworth, Dean, School of Economics, University of Pittsburgh:

"This depends upon gold mining processes and the possibility of opening up new fields."

Lee Galloway, School of Commerce, New York University:

"It will until the cost of producing an ounce of gold overtakes the profits due to mining it."

Cheesman A. Herrick, Girard College:

"I do not."

I. Grinfeld, Columbia University:

"If gold remains the monetary standard, and if the production of gold keeps on increasing, the price level is likely to become still higher than it is at present."

Walter E. Clark, The College of the City of New York:

"Yes."

W. G. Hastings, College of Law, University of Nebraska:

"I do not."

Lewis H. Haney, School of Economics, University of Texas:

"I have not the special knowledge necessary to even hazard an opinion on the question. It would be my guess that the rate of advance will be much less in the future."

Geo. G. Groat, Ohio Wesleyan University:

"I am inclined to think it will."

M. T. Copeland, New York University:

"I believe that the price level will continue to advance for a period of years, but at a constantly declining rate."

W. F. Gephart, Ohio State University:

"Somewhat, but not continuously nor at the same rate of increase as in the past."

John E. Brindley, Professor of Economics, Iowa State College:

"I think the tendency will be in that direction, although I do not expect to see prices advance as much in the next 10 years as during the last 10 years."

Francis H. Bird, University of Wisconsin:

"Such seems to be the tendency."

Augustus O. Bourn, Columbia University:

"Yes."

J. E. Hagerty, Ohio State University:

"Yes."

H. J. Davenport, University of Missouri:

"Yes, but very much more slowly."

Frank H. Hankins, Clark University:

"In all probability, since it seems very likely that the gold supply will continue to run ahead of current demand, relatively. The increase in banking and credit facilities makes it possible for smaller and smaller amounts of gold to carry on greater and greater amounts of business.'

Frank T. Carlton, Professor of Economics, Albion College:

"With the increasing supply of gold the price level will continue to rise unless other forces counteract the effect of the gold supply."

Albert S. Bolles, Haverford College:

"It may. The rise is one of the results of over-capitalization of several very important kinds of business and will continue until this condition of things has changed. When the inflated capitals are reduced through legal or other ways then prices will begin to decline generally."

A. G. Fradenburgh, Adelphi College:

"I do not. I think the present level of prices will continue for some time."

Fred. R. Fairchild, Assistant Professor of Economics, Yale University:

"I do not wish to make any prophecy."

Everett W. Goodhue, Colgate University:

"Yes."

Royal Meeker, Department of Economics, Princeton University:

"No. The cost of mining gold will eventually check its output."

C. C. Huntington, Department of Economics and Sociology, Ohio State University:

"These things tend to move in cycles. Symptoms indicate a decline in the near future."

J. L. Gillin, Department of Political Economy and Sociology, State University of Iowa:

"Yes. With the lessened use of money, and the increased use of other things for money; with the growing demands of our people for luxuries as well as for the necessities of life there is bound to be a growth in cost of living as measured by money as well as really."

Rockwell D. Hunt, Department of Economics and Sociology, University of Southern California:

"Yes, very slowly and with considerable vacillation; the price level may even decline temporarily."

H. O. Allison, University of Missouri:

"Yes."

What Form of Investment Do You Consider the Most Desirable in a Period of Rising Prices?

Irving Fisher, Professor of Economics, Yale University:

"Stocks rather than bonds, but all investments are insecure—stocks because of the ordinary risks of particular businesses, and bonds because of the risk of a fall in the purchasing power of gold."

Joseph French Johnson, Dean of School of Commerce, New York University:

"First: Railroad and good industrial stocks. Second: Real estate and farm land."

Willard C. Fisher, Professor of Economics, Wesleyan University:

"Among securities, stocks; otherwise, direct business enterprise."

Henry R. Seager, Professor of Economics, Columbia University:

"Stocks rather than bonds."

E. W. Kemmerer, Professor of Economics, Cornell University:

"Conservative types of investment in which the investor participates in the added money profits arising from rising prices and rising interest rates."

John T. Holdsworth, Dean, School of Economics, University of Pittsburgh:

"Short term bonds, if safety is the first consideration in the investment."

Lee Galloway, School of Commerce, New York University:

"Short time paper."

Cheesman A. Herrick, Girard College:

"Mortgages and bonds."

I. Grinfeld, Columbia University:

"Stocks, especially industrials."

W. G. Hastings, College of Law, University of Nebraska:

"Real estate and securities based on it not running too long."

Lewis H. Haney, School of Economics, University of Texas:

"Certainly not one which, like endowment life insurance or bonds, brings a relatively fixed number of dollars at the end. What will be most desirable depends upon the character of the rise in prices. If it is so general and equal as to indicate a mere decreasing value of money, investment in any industry which produces for a lasting market would do—assuming equally efficient management, etc. But if certain prices advance first

and fastest, indicating special limitations on supply, etc., the largest returns are to be sought in such industries. Of late years, farm lands, and stocks of corporations controlling valuable natural resources (oil, coal, water power, timber, etc.), seem to be the logical money makers."

M. T. Copeland, New York University:

"Inasmuch as there is still more or less of the speculative element in all classes of investment, I am not ready to generalize on this point. For the average man an investment in some security, the stability of which has been proven, seems to me advisable. Discrimination is necessary in each class."

W. F. Gephart, Ohio State University:

"Stocks."

John E. Brindley, Professor of Economics, Iowa State College:

"Good real estate loans, first mortgage bonds and securities of that class."

Francis H. Bird, University of Wisconsin:

"Stocks."

Augustus O. Bourn, Columbia University:

"The ownership of equities and not bonds."

J. E. Hagerty, Ohio State University:

"Cannot answer this briefly."

H. J. Davenport, University of Missouri:

"Property of some sort—e. g., lands and common stocks."

Frank H. Hankins, Clark University:

"Industrial stocks. Such companies are in position to advance their prices and maintain or even increase their profits."

Edward M. Arnos, Professor of Political Economy, Olivet College:

"Other things being equal, it would seem that land would be the best investment in a period of rising prices."

Albert S. Bolles, Haverford College:

"Railway securities with respect to the next advance. They may fall somewhat, but are sure to go higher ultimately."

A. G. Fradenburg, Adelphi College:

"Stocks in good industrial plants."

Fred. R. Fairchild, Assistant Professor of Economics, Yale University:

"Other things being equal, stocks are more desirable than bonds during a period of rising prices."

Everett W. Goodhue, Colgate University:

"It is a little difficult to say, but I am inclined more and more toward investment in good agricultural land."

Royal Meeker, Department of Economics, Princeton University:

"Impossible to say."

C. C. Huntington, Department of Economics and Sociology, Ohio State University:

"High-grade short-term bonds, or deposits in a safe bank, until the period of depression so that funds may be available then for good investments at low prices."

J. L. Gillin, Department of Political Economy and Sociology, State University of Iowa:

"Real estate mortgages, especially farm mortgages. Next, industrials based on good sound business in the production of goods which are staples. Next, railroad securities, especially bonds of roads which are soundly and firmly established."

Rockwell D. Hunt, Department of Economics and Sociology, University of Southern California:

"Western lands and securities connected directly or indirectly with the soil and its produce."

H. O. Allison, University of Missouri:

"Stocks and low-priced farm lands."

Summary

Of the 32 economists answering the first question, "Do you believe the increased gold supply is the basic cause of the present high cost of living?"

16 reply definitely in the affirmative; 13 more agree that it is the chief cause or one of the chief causes, though other factors have contributed. Three answer definitely, "No." There is a preponderance of testimony, therefore, substantiating the gold-supply theory.

Thirty make reply to the second question: "Do you believe the general price level will continue to advance in the future?" Of this number, 15 answer in the affirmative without qualification; 11 believe that prices will continue to go higher, though less steadily and not indefinitely; while 4 predict that prices will remain at their present level or decline in the near future. Here, too, the weight of testimony is very evidently predictive of a continued increase in prices.

To the investor, the most important of the queries propounded is the third, which asked for an expression as to the most desirable form of investment in a period of rising prices. Of the 26 making reply to this, 16 specifically recommend stocks, 6 specify real estate, 3 short-term bonds or notes, and 1 suggests mortgages or bonds. Thus 22 out of 26 are clear in their choice of investments which give the buyer an equity in something.

The stockholder and the landowner participate in the increasing scale of values; the higher the level of prices, the more valuable do their holdings become. The investment of the person who holds bonds alone, on the other hand, decreases in value, because not only are the rate of interest and the principal of the loan fixed and limited, but the money standard in which they are payable is constantly depreciating. It is significant that three of the four who favor bonds are careful to specify short-term securities, so that the principal involved may not be too long subjected to continued contraction in buying power.

Conclusion

The consensus of opinion of these 32 economists would therefore seem to be:

1. That the gold supply is the basic cause, or at least one of the chief causes, of the present high price level.

2. That the present price level is practically certain to continue to advance in the future.

3. In view of the two preceding conclusions, the most desirable form of investment is one which gives the investor a share in the ownership of a property or enterprise, i. e., stocks, real estate, or bonds carrying a stock bonus.